Drug & Cosmetic INDUSTRY

What's in good Baking Powder BESIDES CO_2

How often have you heard the nostalgic cry, "Oh, for the biscuits mother used to bake." Actually modern baking is far superior to that of childhood memory, thanks to such ingredients as Snow Top Precipitated Calcium Carbonate.

Because its purity meets Pure Food & Drug Act and U.S.P. requirements, Snow Top is being used increasingly in such other edible products as table salt, antacid tablets, chewing gum and confections. Leading drug and cosmetic manufacturers prefer Snow Top Precipitated Calcium Carbonate U.S.P. because of its dependable quality. They know that Snow Top is prepared for their *individual formula* and that each succeeding shipment is an *exact duplicate* of their specifications.

Snow Top is available in the following five grades to provide a wide selection to meet your specifications. Write for your sample today.

SPECIFICATION RANGES FOR SNOW TOP

Grades According to Density	Rattle cc.	Flow* cc.	2-Hour cc.	Final** cc.	g/cc.	Drop Density*** lbs./ft.
Super Light	30-38	40-48	70-90	55-65	.400-0.300	25.0-18.7
Light	20-30	27-40	45-70	40-55	.550-0.475	34.3-29.6
Medium	17-23	19-27	25-45	24-40	.675-0.550	42.1-34.3
Heavy	15-17	15-19	20-25	19-24	.800-0.675	49.9-42.1
Extra Heavy	11-15	11-15	15-20	15-19	.950-0.800	59.3-49.6

**Measure of the absorption ratio* ***Measure of wet bulk* ****Measure of dry bulk packing density*

Snow Top Precipitated Calcium Carbonate ★ Tallex Abietic Acid ★ Nuchar Activated Carbons ★ Liquid Caustic Soda ★ Chlorine ★ ★ Indulin (Lignin) ★ Ligro Crude Tall Oil ★ Indusoil Distilled Tall Oil ★ Tallene Tall Oil Pitch ★ Sulphate Wood Turpentine

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Drug & Cosmetic INDUSTRY

MARCH 1946

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INSIDE NEWS

MARCH PREPARED BY NATIONAL CAN CORPORATION, NEW YORK, N. Y. 1946

Nationwide Survey Reveals Reasons Behind Trade Preference for Cans

A comprehensive survey, made by an independent research organization for the Can Manufacturers' Institute, an important can industry group, brought new light to bear on the type of processed-food containers preferred by several branches of the trade. From coast to coast, interviewers visited typical cities, towns and villages contacting a representative group of brokers and wholesalers, and all types of retail outlets, from supermarkets to country stores.

Great care was taken to make all questions strictly impartial. At no time did the research investigators or those interviewed know that the fact-seeking sponsor had any connection whatsoever with the tin can industry.

Cans Favored by Large Majority

Of the 3,043 retail grocers called on, 2,649 voiced preference for the tin can as the container for packaged processed foods.

The greatest number of votes, 1,059, cast by these retailers went to cans because of "less breakage" and "no loss in handling". Close behind this dual reason were the following: 717 votes for "easier to display and handle", 344 for "easier to store and stack", 172 for "less cost", 154 for "attractiveness in display". 203 retailers gave other miscellaneous reasons for their preference for cans.

Choice for Display

For window, shelf, counter, floor and jumble displays, from 7 to 9 out of every 10 grocers preferred tin cans to any other type of container. Thus, the steel-and-tin can more than held its own strong position from the standpoint of attractiveness in display.

Greater Value in Cans

When questioned on *value to the customer*, 9.3 out of 10 retailers believed that foods in cans gave their customers *greater value* than foods packaged otherwise.

According to the majority of grocers interviewed, the housewife goes for canned foods because she *knows* the time-tested dependability of cans. She knows cans keep foods full of fresh flavor and goodness. She appreciates that cans are convenient time-savers, since she can handle them, open them and dispose of them easily.

And as for *pushing* a product, 8.3 out of 10 retailers preferred having their customers buy products in cans!

Summing up the grocers' vote, 8.3 out of 10 said they would rather handle food packed in cans than in any other type of container. The retailers' vote is an important one because retailers are the last hurdle for the food processors product before it reaches the consumer.

Wholesalers, Brokers Prefer Cans

Among wholesalers, the vote was 9.4 out of 10 for cans. Among brokers, 9.3 out of 10 preferred cans.

Made of steel, most cans are coated with pure tin to protect the steel from oxidation. No other containers protect their contents in so many ways as do the hermetically sealed food cans.

For many years, National Can Corporation has been manufacturing such tin cans as well as steel drums and pails for the food, drug, cosmetic, chemical, oil, paint and varnish fields. You can take advantage of this long and varied experience by consulting a National Can specialist for help in working out your own particular packaging problem. Call or write your nearest National Can Corporation office or the executive offices at 110 East 42nd Street, New York 17, N. Y. 1221

New Germicides

Known as quarternary ammonium compounds, new germicides being tried out at a state experimental station are reported to show complete destruction of bacterial life in five minutes after exposure of organisms in solutions consisting of as low as one part in 20,000 parts water. 1222

Synthetic Amino Acids

Synthetic *dl*-leucine, demonstrated by microbiologic assay, is reported to be free from isoleucine and other amino acids.

Of the ten essential amino acids required by human beings for maintaining positive nitrogen balance and by rats for optimum growth, this synthetic *dl*-leucine is one of them. It has been tried with mice, dogs and chicks and has been shown to be essential to them. 1223

Flexible Cloth-Coating Compound

A cloth-coating compound of vinyl butyral that retains flexibility at below 0° F. has recently been announced. Until its development, use of vinyl resins for Army ponchos and other waterproof apparel had been handicapped by the fact that they became stiff at low temperatures in comparison to other compounds. 1224

Tough Synthetic Enamels

It is announced that a group of all-synthetic, hi-bake enamels that give an exceptionally hard, stainproof finish have been designed to endure heavy household usage. These enamels are produced in several whites, one designed for refrigerators, deep freeze units, stoves, ironers and electric mixers, and another for dishwashers and washing machines.

Tests have shown that these enamels have an unusual degree of resistance to water, alkali, normal fruit acids and vinegar. They also resist the action of hot soapy solutions without dulling or excessive softening or embrittlement. The coating has exceptional color retention and is reported to have good abrasion resistance. 1225

Hydrogen in Cans

Hydrogen is now obtainable in cans for use in laboratory operations. Packed in small tin cans, calcium hydride can be preserved indefinitely. When the need for hydrogen develops, a few holes are punched in the top of the can, and the whole is submerged in water. As it is released, hydrogen is collected in a rubber envelope. Thus, hydrogen is supplied at sufficient pressure at any desired rate. 1226

Canned Chocolates

Chocolates, many months old and stored in jungle heat and humidity, are as fresh and shapely as the day they were made, thanks to the hermetically sealed cans that protect their goodness! Several candy companies, to fill orders for tropic shipments, drafted the familiar coffee can to do the carrying. So well did the cans do their job that the chocolate makers plan to continue can packing and look forward to a sizable export business as well as at-home popularity for canned chocolates. 1227

Canned Juices

Production of canned Vitamin C juices has multiplied during the war years. The pre-war output of canned orange juice totalled about 3 million cases a year. The 1944 pack for Florida alone was almost 14 million cases. Grapefruit juice has spurted from 12 million cases to more than 21 million cases. Blended grapefruit and orange juice has climbed from 1½ million cases to approximately 8 million. 1228

NATIONAL CAN

PLANTS: NEW YORK • BOSTON • BALTIMORE • CHICAGO • HAMILTON, OHIO • FORT WAYNE, INDIANA

New Food in Cans

A canned food unknown before the war but now popular with housewives is canned mussels — an example of canners' ingenuity in meeting war born shortages. Mussels are far more fragile than oysters — they cannot be boiled or baked at a high heat nor should they be cooked by methods which might cause them to lose their shape. The canners met the challenge, and put the delicate mussels in cans with nary a trace of shell. Housewives' acceptance of the new product augurs well for its future popularity. 1229

Canned Cannons

How to keep cannons fresh? Put 'em in cans, of course. And that's exactly what is being done with the surplus big guns, bazookas, and anti-aircraft weapons — expensive equipment that would be lost to our guard-the-peace arsenal without the protective covering of the sturdy light-proof, moisture-proof can. 1230

Natural Camphor

Natural camphor from an American farm crop may be available to medicine and industry as a result of experiments. The plant, camphor basil, a perennial undershrub native to Kenya, Africa, has been grown experimentally for eight years in Maryland. Chemical and physical properties of the purified distilled oil agree closely with natural camphor, for years a Japanese monopoly. 1231

N.D.G.A.

A new chemical as important to the canning industry as penicillin is to medicine has been used in the canning of foods going to the armed forces. Of vegetable origin, Nordihydroguaiaretic Acid, amazes the food industry with its capacity for preserving the sweet flavor of foods containing either animal or vegetable fats. Very soon housewives will undoubtedly become familiar with N.D.G.A. on can labels signifying still another protection of the purity and quality of food in cans. 1232

Technical Topics

PAINT ADHESION—According to a recent patent, adhesion of paint to aluminum surfaces is reported increased and corrosion retarded by preliminary dipping in a warm aqueous solution of a monobasic phosphate, an oxidizing agent, and a double fluoride. 1233

COMBATS PARASITES — Dinitrocresols, especially dinitro-orthocresol, are being promoted as especially valuable for the winter-spraying of fruit trees to combat insect and fungous parasites. It is also used as a weed killer. 1234

NEW RAT POISON — A new rat poison said to be as fatal to rats as DDT is to insects is reported as a new development. Sodium fluoroacetate, now considered too dangerous for use by average persons, is expected to be available soon with regulation for safe use. 1235

PHENOL COMPOUNDS USED TO REPEL TERMITES — According to recent announcement, certain compounds will repel if phenol is impregnated into wood. 1236

CHLORINE DIOXIDE PRODUCED — It is reported that a method has been discovered for producing chlorine dioxide, an important bleaching and oxidizing agent, which depends upon the reaction of accurately metered dry chlorine with substantially dry powdered sodium chlorite. 1237

BLOOD FRACTIONATION PROCESS PATENTED—A patent has been issued recently covering a process for the separation of blood plasma into its constituent fractions: fibringen, globulin, albumin, etc., each of which was demonstrated by wartime medical experience to have therapeutic value. 1238

NEW METHOD DETERMINES QUALITY OF OYSTER PACK — It is reported that an objective method of accurately determining the fitness of raw oysters has been developed. 1239

PRODUCING BRIGHT DUCTILE DEPOSITS — It is reported that bright ductile deposits from plating baths containing nickel sulphate, nickel chloride, and boric acid are produced by adding to the bath small quantities of a cyclic structure alkaloid and a naphthalenesulphonate, arylsulphonamide, or arylsulphimide. 1240

PREVENTS SEASICKNESS — Experiments in the transportation of British troops showed that hyoscine, in doses of 1/100 grain, was found to be the best preventive of seasickness. Aside from a bit of drowsiness in some instances, no untoward side-effects were noted. 1241

PRODUCES CYANAMIDE — Cyanamide is said to be produced without intermediate production of calcium carbide by a new process comprising the heating of calcium carbonate at high temperatures, with a mixture of ammonia and carbon dioxide. 1242

INHIBITS CORROSION—Sodium nitrite has been shown to be a good inhibitor of corrosion of steel by water, solution of sodium chloride, and mixtures of alcohol and water. Its application is without adverse effects on the metal. 1243

ADHESIVES MADE FROM YEAST — According to a recent patent, yeast, cultivated on waste sulphite liquor from paper and wood-pulp mills, can be made into a high-grade adhesive by heating it to between 160 and 220 Deg. F. 1244

"FOAMED COAL" PRODUCED FROM WASTE — A porous material consisting of coal particles bound together with thermosetting resin, is reported to merit further research. The process would permit the use of large above ground reserves of material that is now regarded as colliery waste. 1245

Every effort will be made to furnish additional information on these articles. Where such information is not obtainable, we will refer inquiries to the original source of the article. Write to National Can Corporation, 110 East 42nd Street, New York 17, N. Y. Please mention the number at end of article — also name of the magazine you saw it in.

NATIONAL CAN CORPORATION

SANITARY PACKERS CANS • PLAIN AND LITHOGRAPHED CANS FOR FOODS, DRUGS, OILS, PAINTS, VARNISHES • STEEL DRUMS AND PAILS

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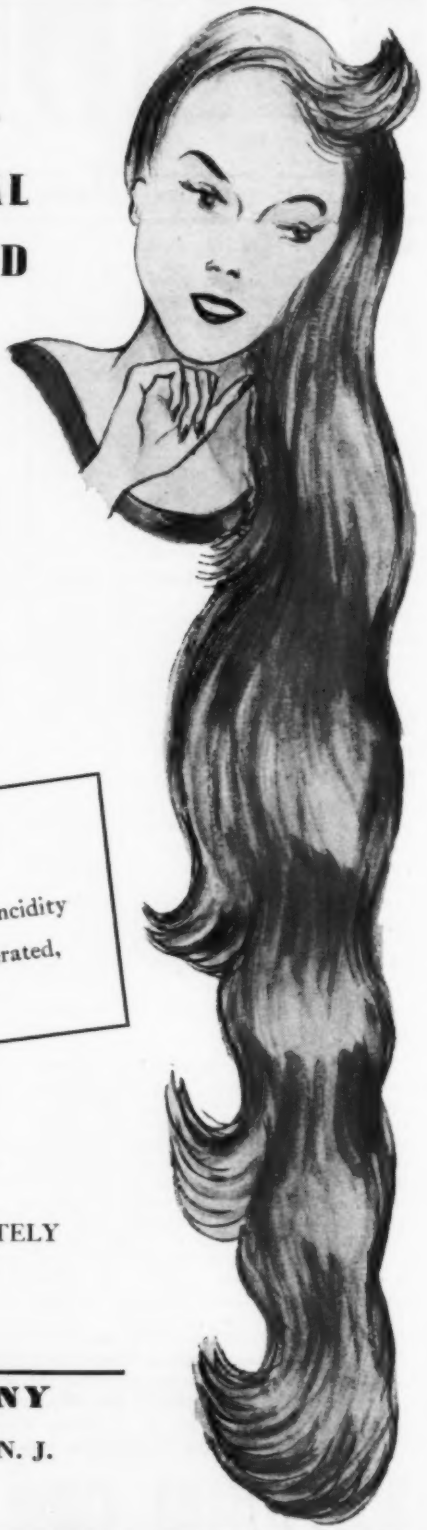

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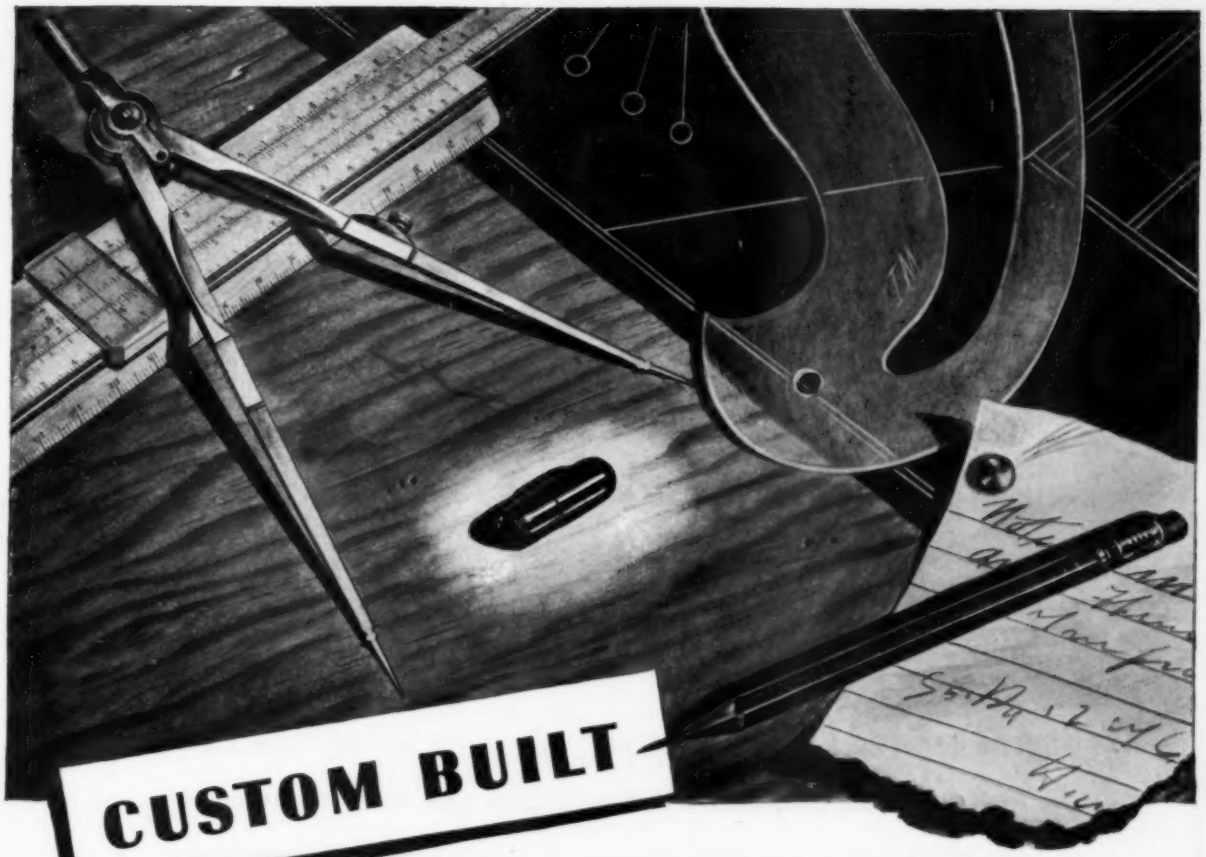

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April-2-3-4-5, 1946

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50 parts MIRANOL OH
Add water to desired concentration

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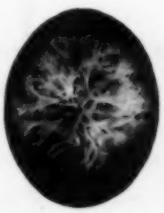

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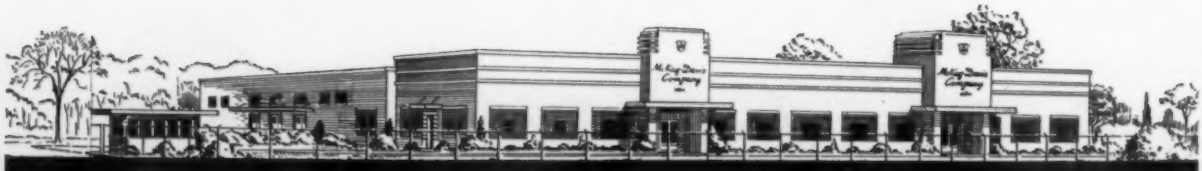

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"King of the Sulfonamides"

Powder...or...Micronized

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Detailed technical bulletins are available on all these products and CALCO'S Technical Application Department will welcome the opportunity to assist you in the development of special formulae.

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- Aminoacetic Acid USP
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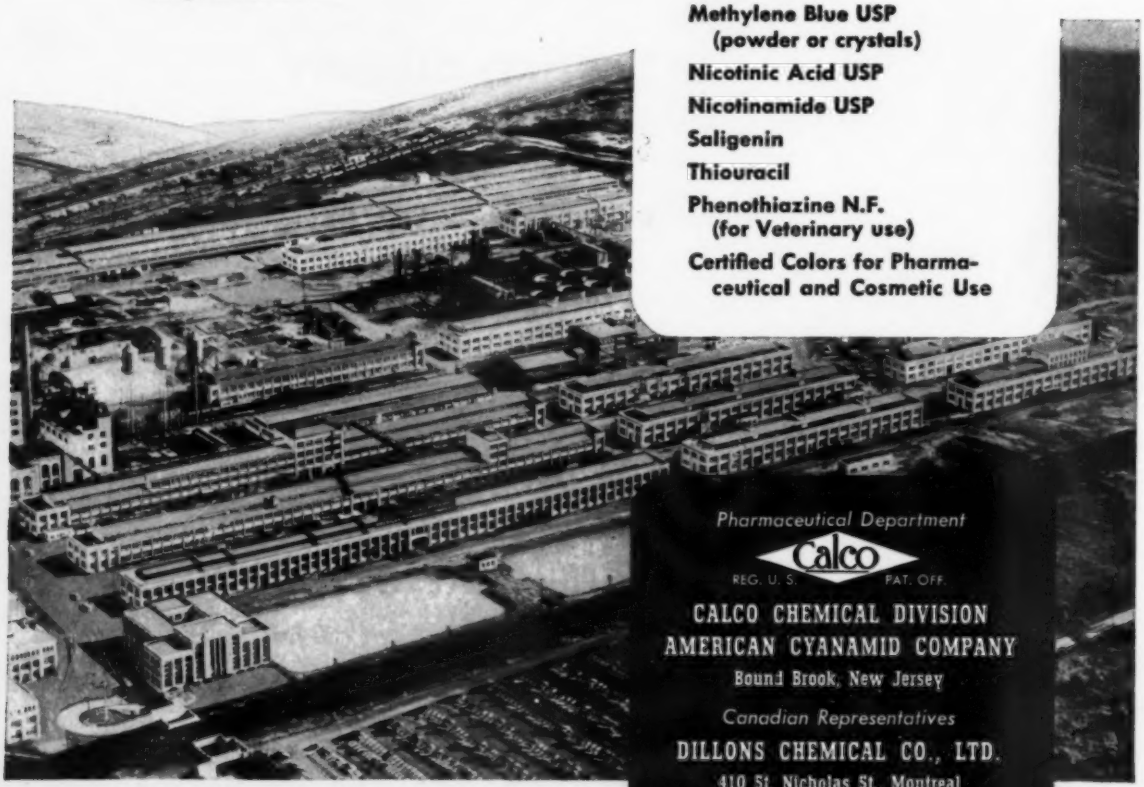
- Mandelic Acid USP (and Calcium Salt)
- Menadione USP
- Methylene Blue USP (powder or crystals)
- Nicotinic Acid USP
- Nicotinamide USP
- Saligenin
- Thiouracil
- Phenothiazine N.F. (for Veterinary use)
- Certified Colors for Pharmaceutical and Cosmetic Use



Pharmaceutical Department

Calco

REG. U. S. PAT. OFF.

CALCO CHEMICAL DIVISION
AMERICAN CYANAMID COMPANY
Bound Brook, New Jersey

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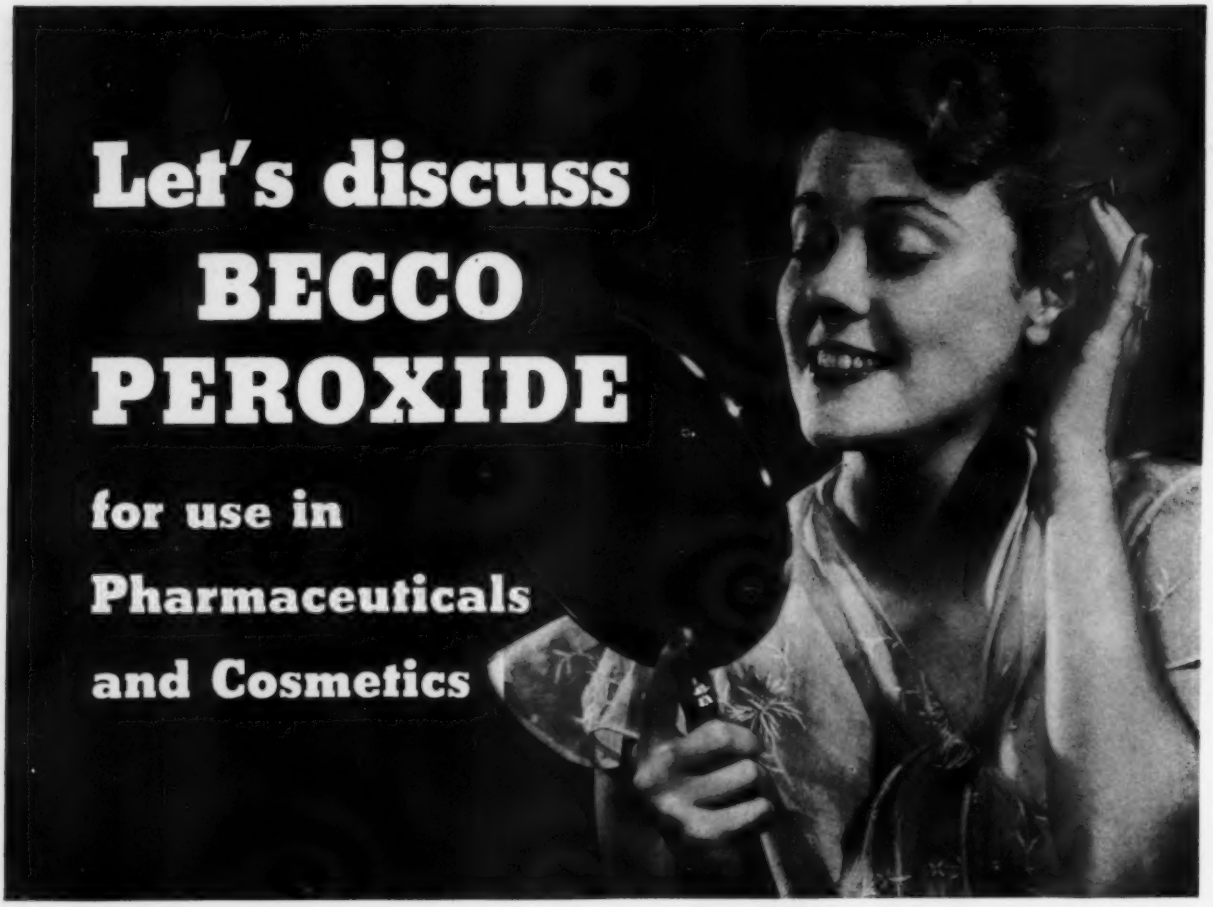
Let us make suggestions for your new odor!
NAUGATUCK AROMATICS
NEW YORK



Hydrogen Peroxide is the most universal bleaching and oxidizing agent known. In the manufacture of many pharmaceuticals and cosmetics its purity and stability are well known. The wide variety of applications in this industry for "peroxygen" chemicals cannot be itemized here, but the following few sample descriptions are typical of the many uses of a wide variety of Becco "peroxygen" chemicals:

Becco Hydrogen Peroxide 27.5% by weight (100 volume) — 1. for bactericidal, germicidal and insecticidal applications; 2. as a source of oxygen gas.

Becco Sodium Pyrophosphate Peroxide—a mild oxidizing and bleaching agent, especially suitable where simultaneous detergent action is required. In pharmaceutical products. In Cosmetic preparations. In oral hygiene for sterilization and cleansing of dentures.

Becco Sodium Carbonate Peroxide—as an alkaline oxidation and bleaching agent. In pharmaceutical products. In cosmetic preparations. In oral hygiene for sterilization and cleansing of dentures.

Becco Urea Peroxide—source of water-free hydrogen peroxide. In pharmaceutical products and cosmetic preparations.

Becco Metallic Peroxides: Magnesium Peroxide 50%—Calcium Peroxide 60%—Zinc Peroxide 55%. All three are used in pharmaceutical products; in cosmetic preparations; as chemotherapeutic agents; for food processing; for oxidation and other reactions at high temperatures.

Becco Acetyl Peroxide in Dimethyl Phthalate—bleaching agent—germicide—non aqueous source of active oxygen.

Whether your requirements call for organic oil-soluble peroxides or inorganic water-soluble peroxides, why not call on Becco engineers, scientists and chemists to recommend the type best suited to your particular purpose. Write to:

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As Intermediates or End Products, Hooker Benzoates have the Purity You Want

Whether you are interested in benzoates as intermediates for the preparation of other compounds or in their use as end products, you need chemicals of high purity. Because of their consistently high quality, their freedom from impurities, Hooker Benzoates are first choice among careful buyers. These Hooker products have found use in widely varied fields—as preservatives for foods, cosmetics, and rubber—as intermediates in the manufacture of dyestuffs and medicinals—as ingredients of soaps and perfumes.

In whatever chemical field you are working, you may find a profitable use for one or more of the Hooker Benzoates whose properties are listed below. More complete information on the benzoates as intermediates and preservatives is available in bulletin form. Individual Technical Data Sheets on these important Hooker Chemicals will be sent to those making requests on their business letterheads. Our Technical Staff may also be able to work with you on the application of Hooker Benzoates or the other Hooker Chemicals to your particular needs.

HOOKER RESEARCH *Presents*

BENZOTRIFLUORIDE

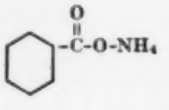
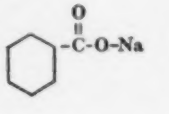
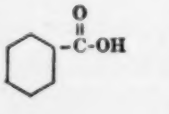
$C_6H_5CF_3$

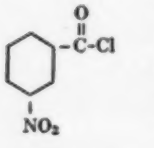
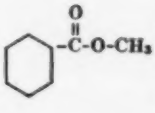
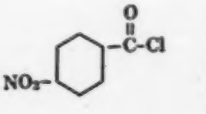
Molecular Weight	146.1
Freezing Range	−28.5° to −29.5°C
Boiling Range (ASTM, 98%)	2.5° including 101°C
Refractive Index, n_{20}/D	1.4145±.0005
Specific Gravity, 15.5°/15.5°C	1.197±.001

A study of possible applications indicates that Benzotrifluoride may be of value in several industrial fields: Dyestuffs, dielectrics, medicinals, insecticides or chemical synthesis.

Hooker Benzotrifluoride is a water white liquid with aromatic odor, completely miscible with most common solvents. Thermal stability is excellent and under nitration or chlorination the CF_3 group is strongly meta directing.

Benzotrifluoride is already available in pilot plant quantities. A request on your business letterhead will bring a research sample and technical Data Sheet No. 350, describing physical and chemical properties more completely.

PRODUCT *Chemical Formula* *Molecular Weight*		DESCRIPTION & USES
Ammonium Benzoate, Tech. $C_6H_5COONH_4$; 139.1		White crystalline solid. Preservative for latex and adhesives; manufacture medicinals.
Benzoate of Soda, U.S.P., Tech. C_6H_5COONa; 144.0		White, odorless crystalline solid. Purity 99% min. Preservative for tomatoes, catsup, margarine, fruit juices, pharmaceuticals, tooth paste and powder; curing tobacco.
Benzoic Acid, U.S.P., Tech. C_6H_5COOH; 122.1		White odorless, crystalline solid. Purity 99.3% min. Manufacture of dyestuffs, perfumes and pharmaceuticals, ingredient of cosmetics, pharmaceutical preparations, antiseptics, dentifrices; preservation of food; curing of tobacco.

PRODUCT *Chemical Formula* *Molecular Weight*		DESCRIPTION & USES
Metanitrobenzoyl Chloride $NO_2C_6H_4COCl$; 185.5		Yellow to brown liquid, partially crystallized. L. C. P. 28° to 31°C. Manufacture dyes for fabrics; color photography; pharmaceuticals.
Methyl Benzoate $C_6H_5COOCH_3$; 136.1		Clear, colorless liquid. Sp. Gr. 1.0930. B. R. 2° including 199°C. Ingredient of perfumes, soaps and medicines; preservative for rubber.
Paranitrobenzoyl Chloride $NO_2C_6H_4COCl$		Yellow crystalline material in lump form. Decomposes in water and alcohol; soluble in ether; M. P. 70°C min; purity 95% min. Manufacture of Novocaine and dyes.

HOOKER ELECTROCHEMICAL COMPANY

13 Forty-Seventh St., Niagara Falls, N. Y.

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Caustic Soda **Muriatic Acid** **Sodium Sulfide**
Paradichlorbenzene **Chlorine** **Sodium Sulfhydrate**

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With surprisingly helpful results—due to our long established world-wide contacts and broad laboratory facilities.

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CHEMICALS

VETERANS OF WORLD WAR II:
To help you in purchasing surplus property from War Assets Corporation, a veterans' unit has been established in each of our Regional Offices*.

GOVERNMENT-OWNED SURPLUS NOW!

HYPOCHLORITE BLEACH—one year old material; manufactured with 30% available chlorine; grade 3; available as follows for 1¼ cents per pound in carload lots; (F.O.B. location).

Birmingham — 305,600 lbs. in 400 lb. drums. Also one carload of grade 2, packed in 100 lb. drums.

Salt Lake City—8,785,572 lbs. in 43 and 50 lb. steel drums.

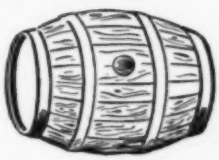
40% CHLORINATED PARAFFIN for fire proof, water proof and mildew proof coatings. Approximately 9 million pounds available for 2 cents per pound in car load lots or total amount at a single location, F.O.B. location as follows:

Boston, Cleveland, Detroit, Philadelphia, Richmond and Salt Lake City

MIXED XYLIDINES; 7 cents per pound, carload lots, F.O.B. location.

POTASSIUM SULPHATE available for 10 cents per pound, F.O.B. location as follows:

Minneapolis: 93,075 lbs. in 400 lb. (app.) wooden barrels.
Chicago: 53,355 lbs. in 35 lb. fiber drums.



The chemicals shown here are surplus war material. They are available now at quick sale prices to meet civilian production needs. As with hundreds of other similar surplus chemicals they may be obtained by writing, wiring, or phoning your nearest War Assets Corporation office*. Make it *your* habit to check this source whenever your stock needs replenishing.

**In directories simply look up Reconstruction Finance Corporation. War Assets Corporation is an R.F.C. subsidiary.*

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OIL TYPE, READY MIXED PAINT—SPEC. T-1215

Ready for use. This paint, containing linseed oil, may be brushed or sprayed to produce a flat finish which dries in a few hours. It is well suited to both interior and exterior walls wherever a medium grade low cost paint is permissible. It may be applied to wood, brick, masonry or concrete.

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COLORS

Light Green, Dark Green, Field Drab, Earth Yellow, Earth Brown, Sand, Olive Drab, Loam, Earth Red, Haze Gray, Black, White

For detailed information contact any of the War Assets Corporation Regional Offices below:
Price: 65 cents per gal., F.O.B. location; minimum sale, 200 gallons.

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To War Assets Corporation:

Without obligation, please send me further information on the following products and place my name on your regular mailing list:

- ☐ Glacial Acetic Acid, C.P. in one gal. bottles.
- ☐ Copper Napthenate, 8% solution in drums.
- ☐ Sodium Sulphite
- ☐ Manganous Chloride
- ☐ Smokeless Powder
- ☐ D.N.T. (Dinitrotoluol)
- ☐ Silica Gel: in various small size fabric bags weighing from 15 grams to 10 lbs. each.
- ☐ Khaki Dyes (basic colors)

Firm.....

Street.....

City.....State.....

155-2

A DISPOSAL AGENCY DESIGNATED BY THE SURPLUS PROPERTY ADMINISTRATION for Surplus Producers' and Capital Goods, Aircraft and Plants formerly handled by Reconstruction Finance Corporation . . . and for Surplus Consumer Goods formerly handled by United States Department of Commerce.

WAR ASSETS CORPORATION

(A SUBSIDIARY OF RECONSTRUCTION FINANCE CORPORATION)

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155-2

3 ethanolamines...

Diethylethanolamine

$(C_2H_5)_2NC_2H_4OH$

...is used chiefly in the syntheses of antispasmodics, anti-malarials, and pain-relieving pharmaceuticals. Its fatty esters are of particular value as emulsifying agents for waxes and oils to be applied under acidic conditions, as in the case of textile waterproofing compounds. These oil-soluble esters can be used in inks and paints as surface-active materials and may have value as rust inhibitors in petroleum products.

Dimethylethanolamine

$(CH_3)_2NC_2H_4OH$

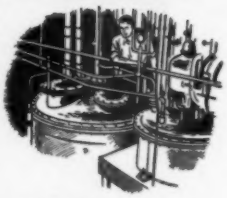
...is an intermediate in the synthesis of compounds used as corrosion inhibitors, anesthetics, acetate rayon dyestuffs, and textile auxiliaries and lubricants. Dimethylethanolamine forms highly surface-active esters which are well suited to cationic flotation processes. It is also valuable itself as a corrosion inhibitor in return condensate low-pressure steam systems.

Methyldiethanolamine

$CH_3N(C_2H_4OH)_2$

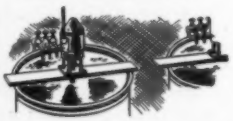
...is an intermediate in the manufacture of resins, pharmaceuticals, insecticide intermediates, emulsifying agents, and textile agents and dyestuffs. Methyldiethanolamine is a tertiary amine with two highly active hydroxyl groups and is a valuable product for the preparation of a wide variety of compounds.

FOR MANY APPLICATIONS, INCLUDING



MANUFACTURE OF PHARMACEUTICALS

MANUFACTURE OF TEXTILE ASSISTANTS



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Unit of Union Carbide and Carbon Corporation

UCC

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What's NEW at NYQ

"Spot" Checking

New only in the sense that it has not previously been publicized, "SPOT" CHECKING has been taking place at NYQ for years to give added quality protection to NYQ chemicals.

Here you see a member of our Laboratory Staff picking a package of NYQ chemicals at random from the stock shelves. The package goes to the laboratory. Our chemists then thoroughly recheck the contents to make certain that they continue to meet all specifications.

"SPOT" CHECKING is your assurance that every package of chemicals bearing the NYQ label is of the highest quality.

In bulk for Manufacturers and in packages for the Wholesale trade

NYQ

Symbol of Quality

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ST. LOUIS DEPOT
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For formulations of Bubble Bath Compounds we recommend Detergent 1011 as a base for liquid products. For Powder Bubble Bath products investigate our Powder 4. For Soapless Shampoos we offer our Shampoo Base M.

Other "Drew Tested" products available are: Base S.E.B., a special cocoanut oil shampoo concentrate – Monoglyceride and other Specialty Emulsifiers for cold creams and depilatory creams – Sulfonated Oils for bath oils.

E. F. DREW & CO., INC.

***Main Office:* 15 East 26th Street, New York 10, N. Y.**

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Please send samples of:

☐ Detergent 1011 ☐ Powder 4
☐ Base SEB ☐ Shampoo Base M

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Company .....

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E. F. DREW & CO., INC.
BOONTON NEW JERSEY

DREW TESTED

"You know, dear—I'm just realizing the debt of gratitude I owe the cosmetic industry!!"

KEEPING POSTED

Less Proprietaries

LOOKING at the present setup in the drug manufacturing division of this industry, proprietary medicines of the old days are disappearing at a more rapid rate as time moves on. This trend is, in large measure, due to the fact that many companies which offered for sale a large number of proprietaries are changing hands and the new management is not very friendly to some of these products. In many instances, some of these products are not at all liked by the American Medical Association and movement on the part of these manufacturers to have some of their newer products approved by the Council on Pharmacy and Chemistry of the A. M. A. is resulting in the abandonment of some of these old products. This is merely to make the company applying for approval look more ethical.

No New Advertised Remedies

INTRODUCTION of new products in the drug industry is practically 100 per cent in the ethical field. No longer do we see the big advertising splurges to the public in an effort to put over a new proprietary remedy. Now new products are the result of research and they are introduced by detailing the doctors and druggists and by advertising in the medical and pharmaceutical journals. However, this has been the trend for many years and it doesn't seem so long ago (although it was just about at the bottom of the depression of the thirties) that Alka-Seltzer came upon the market and made its meteoric rise. We just wonder whether this could be repeated in the present days of ethical thinking in the drug business. We would like to place a small bet that some will surprise the industry within the next few years and do it.

Java Oils, If, When, and As

AN ADVISORY committee to the Dutch Government for the importation of products of the Dutch East Indies has been set up in this country. There is one main committee and there are subcommittees on various types of products. One such subcommittee has been set up for the importation of essential oils which come from Java, such as citronella, patchouli, vetivert, ylang ylang, and possibly some others. The plans are all laid for how to handle the oils when they come in. Importers have been asked to submit their records of imports of these oils from Java for the period of 1939 to 1941 and oils arriving are to be allocated to these importers on a percentage basis. The only trouble is that at present there is no Java Government because there is no settled condition in Java. Furthermore there are no indications just what oils, (if any) and what quantities are on the Island, and if they will be shipped soon or at a date so far in the future that people will lose interest. In other words, a plan has been set up to handle something that might be non-existent, and it has been set up to handle these products in the name of a Government that at the moment has nothing to say about the matter.

Don't Ask Questions

WE LIKE the expression used in advertising a contraceptive vaginal jelly: "When pregnancy is contraindicated." Never mind why it is contraindicated, that's none of your business, the product bears the seal of approval of the A.M.A.

Mathematical Machine Wizard

MATHEMATICAL machines have been an outgrowth of war research. Most people have heard of the one produced at Harvard, and of the still greater one produced at M. I. T. Now comes one to top them all from the Moore School of Electrical Engineering in Philadelphia. This machine into which the Government put $400,000, uses 18,000 vacuum tubes, solves in two hours problems that would take 100 trained men a year, adds at the rate of 5,000 times a second, multiplies a number such as 97,637 by itself 5,000 times in the wink of an eye, in fact it does almost anything including giving the answer in a relatively short time to a problem that would take a trained man 100 years to solve, if he should live so long. We wonder how the hell anyone can check the answers to these intricate problems, and what happens if the machine blows one of the 18,000 tubes. Then again we wonder if these machines can be serviced by the local dealer.

Hard Working Doc

RALPH E. (Doc) Dorland, manager of the New York office of the Dow Chemical Company, is a busy man nowadays due to the honors bestowed on him by two smart trade organizations. For this year Doc has been elected to the presidency of both the Synthetic Organic Chemical Manufacturers and the New York Board of Trade—either of them a man size job. Doc says he must be "in the trade organization presidency business."

Doc is really having his second youth. For we remember Doc many years back when he didn't like to be annoyed with being on committees at conventions, telling us, "I went through all that years ago." Doc likes to tell about the days when he was a retail druggist in Illinois. He loved the State Pharmaceutical Association and particularly the conventions which they held. Doc worked hard on committees in those days and eventually became president of the organization. Incidentally don't pitch horseshoes with Doc without a handicap because he learned a lot about it in his drug retailing days and his hand has never lost its skill even though he became high-hat and took up golf like most other chemical salesmen who thought that in this way they were proving that the chemical industry had become one of the country's major industries.

Doc has always loved the SOCMA, and the association in turn has always loved him. He is only the third president in the long history of this organization, the first being the late Charles Herty, and second being August Merz. Both of these men held the office for long terms of years. Doc has always put his best efforts into the work of the organization because he firmly believes in its aims and purposes. He has also been a very hard worker for the New York Board of Trade, working up to the chairmanship of the Drug, Chemical, and Allied Trades Section of that organization and later becoming representative of that section on the board of directors of the parent body, and still later vice-president of the board.

Doc is a clear thinker, is excellent at expressing himself, and is a particularly quick thinker on his feet. It is to the benefit of the industries he is serving that he is working hard at trade association affairs.

That Cosmetic Tax

ONE manufacturer tells us that the future in cosmetics is not very promising unless the twenty per cent excise tax is repealed. He states that people simply will not buy cosmetics and pay this heavy tax if other goods which are tax free are available. He says it is simply a proposition of value, and the fellow or gal paying twenty per cent tax knows that this payment simply cannot be included in the value of the product that he is buying. And sooner or later, he says, people are going to be conscious of values, it's just common sense.

Labor Costs Rise World Wide

WITH labor costs rising in most producing countries of the world, prices of all raw materials will be higher during the post-war period than during the prewar times. In Switzerland, for example, labor in the aromatic chemical industry now commands a wage of 80 cents per hour against a prewar wage level of 35 cents per hour. Labor costs of people working on the raw materials for the aromatic chemical industry are also increased by similar amounts. In Java, before the war, the native workers got 5 cents per hour plus their rations of rice three times a day. This is due to end as a result of the rebellion in the Dutch East Indies and no longer will we see Java citronella oil at such low prices as approximately 25 cents per pound. Undoubtedly prices on raw materials will fluctuate as in the past, but they will fluctuate within higher levels.

Cosmetic Tax to Stay

HOPE for the elimination of the cosmetic and other so-called luxury taxes by June 30—the end of the Government's fiscal year—were dashed recently by statements from Washington. A hope was held out that these taxes might be abolished by the end of 1946, but certainly not before and no promise was made that they would definitely be abolished at that time.

That Expanding Chewing Gum Market

THIS idea of putting vitamin K in chewing gum for prevention of tooth decay intrigues us for many reasons. In the first place, if Wrigley and Beech-Nut are going for a remedial or perhaps prophylactic product of this sort whatever prevented them from promoting a chewing gum containing phenolphthalein for constipation or containing aspirin for a headache? Perhaps they felt that the field was not large enough although the market for laxatives and headache remedies are quite big ones. Then again perhaps they figure—and rightly—that the market for a prophylactic is much larger because the product will be used by a great many people who would never suffer from serious tooth decay even though they never chewed the gum or, for that matter, even though they never brushed their teeth.

But a product of this character certainly cannot be marketed as a confection under the food provisions of the Food, Drug, and Cosmetic Act. It definitely comes under the drug provisions of the act and is therefore subject to definite labeling provisions that do not have to be met in the case of a confection.

And if this idea of chewing gum to prevent tooth decay catches on, are mothers going to stop objecting to the children chewing gum and perhaps buy it for them so that they will be sure the children chew the right kind? And maybe the children will be allowed to chew gum in school or even in church. We already are known as a nation of gum chewers but think of the expansion in the market if vitamin K is really sold to the public as doing the job. Then again think of the additional amount that the average individual will pick up on his shoes, and think of the increased work necessary to scrape this gum off the floors of the New York subways.

Chemical Shortages

IT SEEMS strange at first though that a nation that superimposed upon a practically normal peacetime production a wartime production of a size that the world has never before witnessed cannot produce in sufficient volume to meet the post-war demand product, albeit considerably above prewar levels. But such is the case and it is not because we are supplying the world although that is what we are supposed to do until such time as we can help foreign countries back to normal in their productive activities.

The public, generally, well realizes the cause of the shortages of those things that were not produced during the war, and it also realizes that strikes are further holding up the return of many of these things. But when one goes back to the shortage of basic raw materials, production of which was greatly expanded for war purposes, it is difficult to understand why, with war demands eliminated, there is not enough to go around.

Caustic soda, one of the basic chemical products has never been as tight in history as it is today. Bichromate of soda, another common product, production of which was inordinately expanded for war use, is in a similar position. In bichromate a seller explains that there is no shortage of raw material to produce the chemical and no shortage of labor but there is no place to house sufficient labor at the plant. Today laborers are living in trailers and all sorts of makeshift housing. Glycerine is another chemical that was expected to be in free supply as soon as wartime demands were curtailed, but here again we find the product in tighter supply than ever. This is due to a generally expanded economy, a shortage of fats and oils that produce glycerine in the soap kettle, and new uses in industrial products, mainly in production of the alkyd resins which are one of the coming raw materials in paint production.

The list of products in tight positions is long but the reasons are similar. However, in the basic raw materials labor unrest and strikes is a comparatively short part of the story.

Amino Acids Available

A WIDE range of amino acids is now available to manufacturers in powder and crystalline form. The synthetic amino acids available together with prices per kilo are: dl-Isoleucine $250.00; dl-Leucine $280.00; dl-Methionine $180.00; dl-Phenylalanine $210.00; Acetyl-dl-tryptophane $347.60; dl-Tryptophane $347.60; dl-Valine $210.00. Natural acids available and their prices are: l-Cystine $38 per kilo; l-Glutamic Acid $18.00 per kilo; l-Tryptophane $139.00 per 100 grams; l-Tyrosine $20.00 per kilo.

Need for Research

TALKING about the future of outside research for the pharmaceutical manufacturer, Dr. Austin E. Smith, secretary of the Council on Pharmacy and Chemistry of the AMA, said that "the time is past when great strides, financial and otherwise, can be made merely by aping the other man's idea." Expressing the opinion that "not everything can be done on 'hunches'," he stated: "Now it is necessary to produce new products, discard old ones, discover ways to produce more economically, and even put promotional activities on a scientific basis. Certainly this is not news to research workers, to detail men, to patent lawyers, just to mention a few interested groups. There are others, however, who need to be sold on such a program."

Common Cold Gets $50,000

FIFTY thousand dollars will be spent by the U. S. Public Health Service in an attempt to find the causes of the "common cold." Other appropriations will be made for development of preventive vaccines after the viruses have been isolated.

Ammonia and Vitamin K for Tooth Decay

THERE appears to be no end to products that are offered for dental caries, or tooth decay. The latest two are ammonia and vitamin K. With reference to the use of ammonia for this purpose a recent report of four scientists before the Chicago Dental Society won the society's annual $500 essay award. The ammonia is administered in the form of dibasic ammonium phosphate—there's that phosphorous again, which with calcium and maybe vitamin D was going to turn the trick many years ago! A rinse and a powder containing this ingredient are still on trial, and—it seems the report is somewhat premature—the reporting scientists say that eighteen months must past before they can be certain that their hunch is going to work. Positive signs so far are that patients using the preparations report that their mouths feel "exceptionally clean;" dental examinations show that their teeth are notably free of white matter and deposits usually present in cases of active decay; there is marked reduction in the number of Lactobacilli acidophilus in their mouths, and these bacteria are used as a measure of susceptibility to tooth decay.

It will be recalled that about the middle of last year hope was expressed that some amino acids might prevent tooth decay. The amino acids were believed to accomplish this result through the presence in the saliva of some people of enzymes capable of producing ammonia from these amino acids. Now the ammonia is being applied more directly so that the presence of the enzymes is not essential. Also dibasic ammonium phosphate is much cheaper than the amino acids.

The second latest method of preventing tooth decay is through the use of vitamin K. The method of use is to be in chewing gum since the research leading to this discovery was sponsored jointly by the Wm. Wrigley Jr. Company and the Beech-Nut Packing Company, both makers of chewing gum, at Northwestern University's Dental school. Results claimed by the dental school show that cavities may be reduced from 60 to 90 per cent through the regular use of chewing gum fortified with vitamin K. It is said that vitamin K retards formation of food acids which apparently cause tooth decay. Vitamin K, an unstable compound, is effective in water. When chewed with gum it retains its beneficial characteristics, is easily administered and effectively dispersed through the mouth. Students have been chewing the vitamin gum for eighteen months, and, while it cannot cure existing decay, it effectively retards it. No vitamin-containing gum is as yet on the market.

Barton Sees Cheaper Dollars

A WARNING to prepare for inflation was sounded by Bruce Barton, then president, but now chairman of the board of Batten, Barton, Durstine, and Osborn, at the mid-year meeting of the Federal Wholesale Druggists Association held in New York last month. Mr. Barton stated that all countries engaged in the war—victors and vanquished alike—have to pay for it, and that those with the greatest wealth and resources have to pay the largest shares. The war, he said, cannot be paid for in hard dollars and the only way that the bill can be met is by depreciating the value of our currency through inflation. This as we have stated before, is in process of being accomplished. Strikes followed by wage increases, easing of price ceilings to give relief because of the higher wages, and higher material costs because of wage increases in other industries are all part of the overall picture.

Chains Business Relatively Higher

TWENTY-FIVE per cent of the retail drug business last year was done by 5,000 chain drug stores throughout the country, while balance of 75 per cent of the business was done by the approximately 45,000 independent drug stores. Thus one-tenth of the outlets did one quarter of the business.

Advertising Expenditures

DRUG and cosmetic (including soap, which by definition in the Federal Food, Drug, and Cosmetic Act is *not* a cosmetic) advertising in general magazines and farm papers reached a dollar volume of $70,000,000 in 1945. This comes within a few dollars of equalling the amount spent in the same media for foods and beverages in 1945 indicating that to people as a whole seek good health and food grooming just as avidly as they seek to fill their stomachs. The five most advertised products were also the only products that spent over a million dollars in 1945. As it happens they are all cleansers of one sort or another:

Swan Soap	$1,382,613
Listerine	1,364,853
Ipana Tooth Paste	1,281,686
Drene Shampoo	1,055,315
Pond's Cleansing Cream	1,052,933

Of the $21,000,000 cosmetics (including soap) advertising spent, $14,000,000 went into women's magazines. And evidently women are now swayed to a greater degree than men by advertising for proprietary medicines since women's magazines got a third, or $3,600,000 of the $11,000,000, spent for drug advertising.

Penicillin Market Steady

THE market for penicillin is steady for the time being now that demand is far in excess of supply and manufacturers and distributors have apparently felt that the fight for position is settled and distribution of all of them is about static. There seems to be little likelihood of a real change until such time as production costs are lowered or the supply is considerably greater than the demand. The oral products, being more or less in the nature of specialties with each producer, do not come in for the sharp competition that affected the injection form, and therefore prices are not so sensitive to competitive quotations.

William R. WARNER and Co. Inc.

MANUFACTURING PHARMACISTS

113 WEST 18TH STREET, NEW YORK 11, N.Y. WATKINS 9-0707

February 1946

Dear Doctor:

Sitting in your comfortable chair at your desk after your last patient has left, you have a habit of looking through the day's accumulation of letters and samples sent by the various pharmaceutical concerns. As you have been so engaged, I wonder if it ever occurred to you that for some months you had not received any letters from that fellow, Elmer H. Bobst.

You will recall his having sent you letters week after week for a long, long time. Letters which, penned in a simple, homely style told of the virtues of the many remedies he had the pleasure of introducing to you through the years for his Company. Letters that never sparkled with fancy language but were sort of heart-to-heart in character and always sincere.

Well, this fellow Bobst has taken up his pen again and will resume letter writing to his many professional friends throughout the land. No longer, however, will his name be signed to letters appearing on the stationery of Hoffmann-La Roche, Inc. Instead of Roche, the letterhead will bear the name of one of America's leading pharmaceutical manufacturers, William R. Warner & Co., Inc.

Yes, this fellow Bobst has taken over the responsibilities and managerial activities of Mr. C. A. Pfeiffer, the man who was almost totally responsible for the building of the great William R. Warner enterprise. And what will Bobst strive to do in guiding the destiny of Warner? Well, he has many things in mind, but of major importance will be a great widening of the scope of research activities by the finely equipped Warner Institute for Therapeutic Research - to find new remedies and improve old ones.

And so I make my bow to you as chief executive officer of William R. Warner & Co. Inc. May I hope that all of your confidence and good will, which I tried always to merit with my letters through the years, will abide in your heart for me in my new undertaking.

Sincerely,

Elmer H. Bobst

P. S. I sort of hate to send out an announcement about William R. Warner & Co., Inc., without mentioning one of its excellent products - 'Celusil' Antacid Adsorbent - which in my opinion acts a little better than anything else of its type. Won't you make use of the enclosed card for tablet samples of 'Celusil'Antacid Adsorbent?

E. H. B.

SERVING MEDICINE THROUGH RESEARCH AND MANUFACTURE

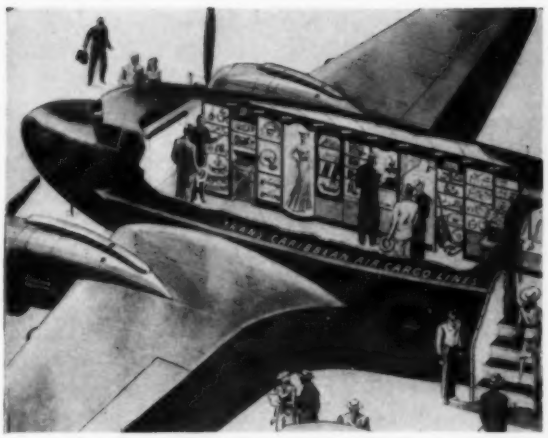
Bobst Direction Taking Form in Warner

NOW that Elmer Bobst has taken over the direction of William R. Warner & Co., the methods that Mr. Bobst has found successful in his experience in building up Hoffmann-La Roche are being applied to Warner. Mr. Bobst has discontinued the multicolor direct mail pieces that Warner formerly employed and has switched to the letters over his own signature which he used while with La Roche. His first letter telling the doctors of his new position is reproduced here.

Mr. Bobst has also ordered the discontinuance of all Warner tinctures, elixirs, fluid extracts, tablets and pills, U. S. P. and N. F. The purpose behind this move apparently is to get rid of all those standard items which are highly competitive, and concentrate on specialties which will be developed through research. The announcement of the discontinuance of these items says that:

"Elimination of the manufacture of competitive pharmaceutical preparations will give the company an opportunity for geater expansion in the pharmaceutical field. With the rapid progress and marked advances being made in medicine and pharmacy, William R. Warner & Co., Inc. feels that it can render a greater service to the profession and to humanity by applying all its energies and resources to new product development with others in the vanguard of scientific research."

One can well surmise that Mr. Bobst will undertake an overhauling of Standard Laboratories—the Warner proprietary drug division—and that he will evolve some individualized plan for Richard Hudnut, the cosmetic branch of the business.



The Flying Showroom

THE latest in cultivating export markets is the "Flying Showroom"—a specially equipped DC-3 cargoliner leaving Miami in April to cover 16 major cities in countries on the East Coast of South America, in two countries of Central America, and in two British possessions. Twenty-eight specially fitted booths in the plane are to be allocated to exhibiting manufacturers. Aboard the plane will be a team of well trained demonstrators, fluent in both Spanish and Portuguese to show the products at each stop. They will give comprehensive and intelligent answers to questions related to sales, deliveries, uses, and prices. Among the products to be shown on this first trip are Henry Rosenfeld perfumes and cosmetics, as well as Kayser gloves and stockings, Coro jewelry, a wide variety of pipes, sun glasses and plastic products, and other American goods. Happy landing!

Aspirin and Vitamin K

THE Wisconsin Alumni Research Foundation, which recently lost the synthetic vitamin D patents, has again popped into the news, but in a different way. This time they are licensing manufacturers to include vitamin K with aspirin to prevent bleeding as the result of taking massive doses of aspirin. Two of the licensees are Lakeside Laboratories and the Bayer Company, but the Foundation expects that within six months all makers of salicylate preparations will be licensed. Lakeside's product, Manacyl, is now available through doctor's prescription.

Housing Shortage and Job-changing

RECENTLY a cosmetic chemist friend of ours stopped in to see us as he was taking a little time off between resigning from one firm to go with another. Other times when he changed positions he quite often moved from one city to another, but this time he changed to another company in the same city. Said he: "You know how it is, you have to find a place to live and that's impossible, so you have to stay in the same city." The poor chaps working for a large company located in a small town with no other similar companies within many miles had better grin and bear it and be sure not to get fired.

A.M.A. Plans for Sickness Insurance

THE American Medical Association has at last worked out a full plan for countrywide voluntary sickness insurance which they are offering in an effort to block compulsory sickness insurance under the Federal Government as provided in the Wagner-Murray-Dingbell Bill. The A. M. A. has set up a subsidiary federation known as Associated Medical Care Plans, Inc. Premium costs will vary in different parts of the country, but it is claimed that the average cost to any individual policy holder would be considerably less than the $144 annual payroll deduction suggested under the proposed Government plan. The plans for various parts of the country worked out in cooperation with the new organization must have the approval of the local State or county medical societies; the medical profession in the area must assume responsibility for the medical services included in the benefits; the plan must provide free choice of a qualified doctor and maintain personal, confidential relationship between patient and physician; be organized and operated to provide the greatest possible benefits.

Benefits might be in terms of either cash indemnity or in units of medical service, with a house call counting for so many units and an office call counting for a varying number according to the terms of the policy.

Plans will be set up for a reciprocal relation among all plans in the country so that subscribers can transfer their memberships from one State to another through a central clearing house at A. M. A. headquarters in Chicago. This will permit large industrial organizations with plants in different parts of the country to secure coverage for all of their employees. Also the Veterans Administration and other Government agencies will be able to provide coverage in any given area through a system of national enrollment.

Associated Medical Care Plans, Inc., made up of participating insurance companies will also undertake research and the compilation of statistics on medical care, provide consultation and information on existing plans, and sponsor an educational campaign to bring the voluntary insurance program before the public.

Costs Are Rising!

WITH prices of practically everything ready to shoot upward, manufacturers in this industry will have to pay close attention to their costs. Wages of labor for all purposes is substantially higher, and a year or so hence another rise in the cost of labor might easily take place. Increased labor costs have already brought about an increase in steel prices of $5.00 per ton, and this increase will be felt in just about everything for the influence of steel prices is extremely wide. Even though there is a possibility that price control by the Federal Government might be retained, prices will be allowed to rise at least in cases where hardships are created by higher costs of labor and raw materials. Certainly business in this country can not go forward if rising costs and fixed prices allow all profits of corporations to be absorbed. So in little steps—first a rise in wages for labor, then a rise in selling prices, and then the process repeated—we are moving surely and quite swiftly, into higher price levels.

PAINTING BY FEDERICO CASTELLON, REPRODUCED FROM THE 100TH ISSUE OF "WHAT'S NEW". COURTESY OF ABBOTT LABORATORIES.

Marketing Amino Acids

THE question of how to market the amino acids so that they will be most widely used and therefore do the most good for the most people, while at the same time reaching the highest volume of sales is a question facing this industry. Amino acids are now available in quantity. There are eight of these amino acids which are made synthetically, and while prices might be considered high for synthetic chemicals, they are no higher than the synthetic vitamins were some years ago. Also as use increases, plants are amortized, and processes improved, these prices can be expected to be materially lower. Chemical manufacturers with an eye to the future are not only willing, but they are anxious to lower prices as soon as they can so that use will be more widespread and thus volume of sales will be greater. This is sound business practice since it changes a product of restricted use to one of general use and thus the product is placed on a sounder basis and the investment of the manufacturer over the long period is protected.

As with the vitamins there are two avenues of use open for amino acids. One is through the preparation, sale, and use of products sold by pharmaceutical manufacturers—first for the use and prescribing of the physician built up through detailing, and later,—it is thought and hoped—through people buying and using these preparations themselves. Pharmaceutical manufacturers generally have the idea that these preparations will vie with vitamins in that people will learn to carry them in their pockets or have them in their homes and offices to take as another necessary supplement to their diets so that they will be certain to have proper nutrition. One of the troubles is that the bulk of the amino acids that must be taken is much greater than that of vitamins. Another difficulty has been that these break-down products of the proteins—which the amino acids are—do not smell and taste so sweetly. However, the problems of taste and odor are being overcome largely through use of the synthetics and through masking of odor and taste.

It is because of the fact that the amino acids, like the vitamins, are dietary supplements that the second avenue of distribution and use of these products is open to manufacturers of them. This avenue of use is in the fortification of foods in a manner similar to the use of vitamins in the enrichment of bread and other food products. This will not interest the pharmaceutical manufacturers but it will interest the basic producers of synthetic amino acids just as it interests the basic manufacturers of synthetic vitamins. While pharmaceutical manufacturers are undoubtedly thinking of preparations which will contain the vitamins, minerals, and amino acids, so the food manufacturers are undoubtedly thinking of adding the amino acids to their products in the manner in which they added vitamins some time ago.

There seems little doubt that the amino acids are to present the next great wave in therapeutics, although it is in the field of nutrition and not in the field of antiseptics or germicides, or in the field of products which are generally classified as remedial agents. However, from the point of view of pharmaceutical manufacturers, the use of these products, because they are nutritional in character, must be divided with the food people although the pharmaceutical manufacturers in conjunction with the medical profession and the chemical manufacturers are responsible for the development and acceptance of these products.

Just as with the vitamins, amino acids will come in for plenty of criticism once they get started on the road to widespread use. And widespread use will come after the doctors start prescribing these products in a general way and the layman using them thinks he knows something new that most people are not as yet aware of. And the more these people talk about their knowledge, the more will their listeners be determined to get some of these new preparations and try them for themselves. And then, as with vitamins, the very ones who are responsible for the growth of the use of the amino acids—the doctors—will start to warn people against indiscriminate use of these new products just as they have warned them against indiscriminate use of vitamin preparations.

Many in the medical profession have long appreciated the need for these break-down products of the proteins in cases of nutritional deficiencies in which the problem was not entirely solved through the administration of vitamins and minerals. These men have long wished that these products were available and that they were available in sufficient quantities and in such forms that these could be easily and pleasantly administered. The time has at last arrived when this wish has been fulfilled and when these products can be put to use generally by the medical profession.

But as with the vitamins, a long period of trial and error lies ahead as to what combinations of these products, what forms, and what methods of administration will be used by the doctors. An enormous number of preparations of various combinations will un-

(Continued on page 442)

Development and Marketing of

By WILLIAM T. DOYLE and A. R. SAVINA

Part III

Production And Control

After a product has been brought to the pilot plant stage, it should be evident what the manufacturing and control problems are likely to be. Steps may then be taken to provide the required facilities if they are not already available. The research department and pilot plant unit should work in close contact with the production department until all kinks in the manufacturing process have been worked out.

It is hardly necessary to point out that great care must be exercised in each step of the manufacturing process, and control specifications must be rigidly adhered to if pharmaceutical specialties are to reach the consumer in a safe and effective form. With new products this need is even greater since it is not easy to anticipate possible sources of difficulty.

Among the conditions to be met in the production of pharmaceutical specialties are:

(1) The final product must conform with the label specifications.
(2) The product should have good shelf stability.
(3) The composition should not be altered in any way during manufacture that might later on produce untoward reactions.
(4) Sterility, when necessary, should be assured.
(5) Proper environmental conditions should be provided—light, cleanliness, conditioned air, and so on.
(6) Packaging and finishing of the product should conform to the highest standards.

The control department should be regarded as an adjunct to the manufacturing department, with the responsibility of insuring the quality of the finished product. It should therefore be segregated from the research department. Among its duties may be the following:

(1) Test incoming materials and the finished product to establish identity and strength.
(2) Insure correct formulation.
(3) Check manufacturing operations to avert contamination of the product or loss of active matter, and also to insure uniformity of the product.
(4) Check filling, labeling, and finishing of the product.
(5) Make sure government regulations are observed insofar as the package is concerned.

The more complex the product to be manufactured the more alert and careful the control department must be. The department should be staffed with adequately trained personnel capable of developing and carrying out the necessary control procedures to insure the manufacture of products of the highest quality obtainable.

Pharmaceutical Specialties

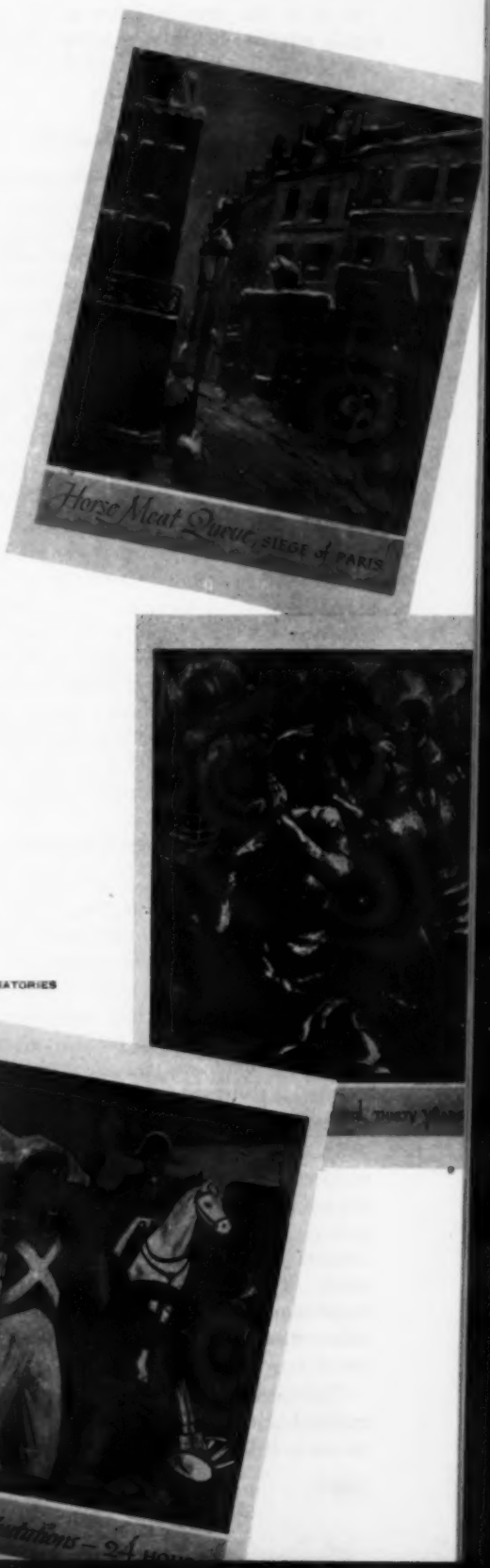
Consultants

No company is completely self-sufficient insofar as research is concerned. The great reservoir of fundamental knowledge constantly being replenished by research conducted in university and hospital laboratories, is a major source of the information on which new product development is based. In addition, the facilities of consulting organizations, hospitals, universities and colleges are often needed to supplement those of the company's own research department. Like all departments and persons connected with new product development great care should be exercised in selecting outside consultation.

Government Regulations

Today, as never before, the pharmaceutical industry must consider government regulations while in the process of developing and marketing pharmaceutical specialties. It is extremely important that at least one person in a company be held responsible for all contacts with the Food and Drug Administration and the Federal Trade Commission. In some companies it may be a lawyer especially trained in Food and Drug and Federal Trade Commission legislation. In others, a man with a well-rounded pharmaceutical experience might be satisfactory. In any case, a thoroughly competent man should have the responsibility and his voice should carry considerable weight in the development and marketing of new products.

Clinical material must be presented to the Food and Drug Adminstration if there is any question concerning the safety of the proposed pharmaceutical specialty. Packages must be carefully labeled and conform with the latest Food and Drug Adminstration regulations. In view of the constant contact between the FDA, the FTC and the pharmaceutical manufacturers, it is probably desirable to know the officials who are responsible for administering these agencies. An understanding of each other's problems goes a long way toward promoting cooperation and serving the public's interests better. Both the American Drug Manufacturers Association and the American Pharmaceutical Manufacturers Association, through their respective headquarters, are well qualified to advise and assist their members in matters involving contact with the Food and Drug Administration and the Federal Trade Commission.



COURTESY ABBOTT LABORATORIES

Production Planning

The sales department is more conscious of the importance of sound production planning than any other single group, for it is the production planning department which has the responsibility of making certain that there will always be a stock of a new product to fill orders; not too much stock so that

the inventory is excessive and costly. Neither must there be too little so that the demand can not be supplied. There is nothing more demoralizing to an enthusiastic sales force than to find a new product "short".

It is in the best interests of the company to be highly selective in choosing a man to head up production planning. A good salary for an able production planner is money in the bank.

Market Analysis

Many companies in the pharmaceutical industry have been slow to recognize the importance of market analysis. Interestingly enough it was the consumer manufacturers who first appreciated the value of market information, but for reasons not clearly understood the pharmaceutical manufacturers, with few exceptions, have seen fit to base their decisions more on opinions rather than on carefully established facts. Those who have used market studies to guide their new product planning would not be without the service today.

Trends in prescribing. . .territory division. . .anticipated sales. . .advertising effectiveness. . .package sizes. . .sales progress. . .potential markets. . .and estimated sales for new products are just a few of the important functions performed by a market analyst or a market analysis department, depending on which the company can afford. It would seem that the future growth of the pharmaceutical industry is dependent on its ability to keep a sensitive finger on the medical and public pulse. Certainly, much money and effort could be saved if closer attention were paid to introducing new pharmaceutical products based in a large measure on what the market studies revealed.

The Sales Department

Sales Management: The sales department is a company's link with the drug trade and the medical profession. It is of utmost importance that the man heading up sales be well grounded in the technique of selling in a difficult market. On the one hand he should have just the right note of restraint necessary in his contacts with the research department and the profession, while on the other he must be able to inspire his men to greater and greater sales accomplishments.

The sales manager is a potent force in any pharmaceutical company. He is usually a part of top management and very influential in the formulation of general policy. The successful execution of advertising, production and new product plans are all tied in with sales. Too much emphasis can not be laid on the importance of selecting a well qualified man for the sales manager job—very aptly described as "the nerve center of a business."

The sales head must be alert to the needs of the medical profession. He should forever be on his toes to see to it that his company brings out new specialties at frequent enough intervals to keep the detail men enthusiastic as a result of their company's accomplishments. New specialties mean dollars in the pockets of pharmaceutical representatives. It is in the best interests of each company to take the necessary steps to insure a reasonable flow of new pharmaceutical specialties—some feel that two such products a year is ideal.

A well-grounded, well-informed sales manager can mean the difference between success or failure. If he has the voice he deserves in management, and if he fully understands and believes in the company's new product policy, a most important and fundamental step has been taken on the road to success.

Sales Estimates for New Products: Estimating the sales for a proposed new ethical specialty is not a job to be envied. Some may use the "by guess and by golly" technique but there are better and more accurate methods which merit careful consideration.

It would seem that the first step in estimating the sales for a new pharmaceutical specialty would be for the sales manager to call in the market analyst—if the company has one—if not, it would be necessary for the sales manager or his assistant to function in that capacity—and get together information on the following points:

(1) Amount of product necessary for initial distribution.
(2) Is the product to be sampled, and in what amounts?
(3) Uniqueness of the product—is the product patented or is it just an improved mixture or combination?
(4) What is the incidence of the disease or diseases for which the product is indicated?
(5) What is the general business picture at the time the product is introduced?
(6) Based on past performance records, what share of a potential market has the sales force been able to get?

No claim is made that when these fundamental questions are answered a magic formula will evolve, but it is fair to state that such information arrived at in an orderly, well thought-out manner will be very useful in clarifying what might otherwise be a jumbled-up picture. Certainly, it will provide a yardstick by which an intelligent estimate may be arrived at.

Distribution: No one is likely to disagree that planned distribution is an important—very important—link in putting over a new pharmaceutical specialty. Too many times we find production guilty of the unforgivable sin of paring down a sales estimate for a new product. They just seem to lack confidence in sales planning. As a result, stocks are "short" and back orders follow. There is nothing more demoralizing to sales and professional service representatives, and it has a negative effect on the prescribing physician, too. To reawaken interest first with a disgruntled sales force, and then with a skeptical

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DR. H. A. B. DUNNING

Scientist, Philanthropist and Executive

ON A small farm near Denton, Maryland in the year 1877 was born Henry Armitt Brown Dunning. Like most farm boys Brown Dunning had to work long and hard. But the experience did give him the benefit of a strong sense of values at an early age. This made young Dunning intensely serious and fired by a burning desire to succeed.

After high school the chief executive of Hynson, Westcott and Dunning went to work in his home-town drugstore of George & Redden. About a year later, ambitious Brown Dunning started his trek to the big city—Baltimore, Maryland. After a brief period with the Downs Brothers Pharmacy, young Brown joined the well-known firm of the then Hynson, Westcott & Company, where he began as stock boy and worked his way up to becoming the present chief executive and principal stockholder.

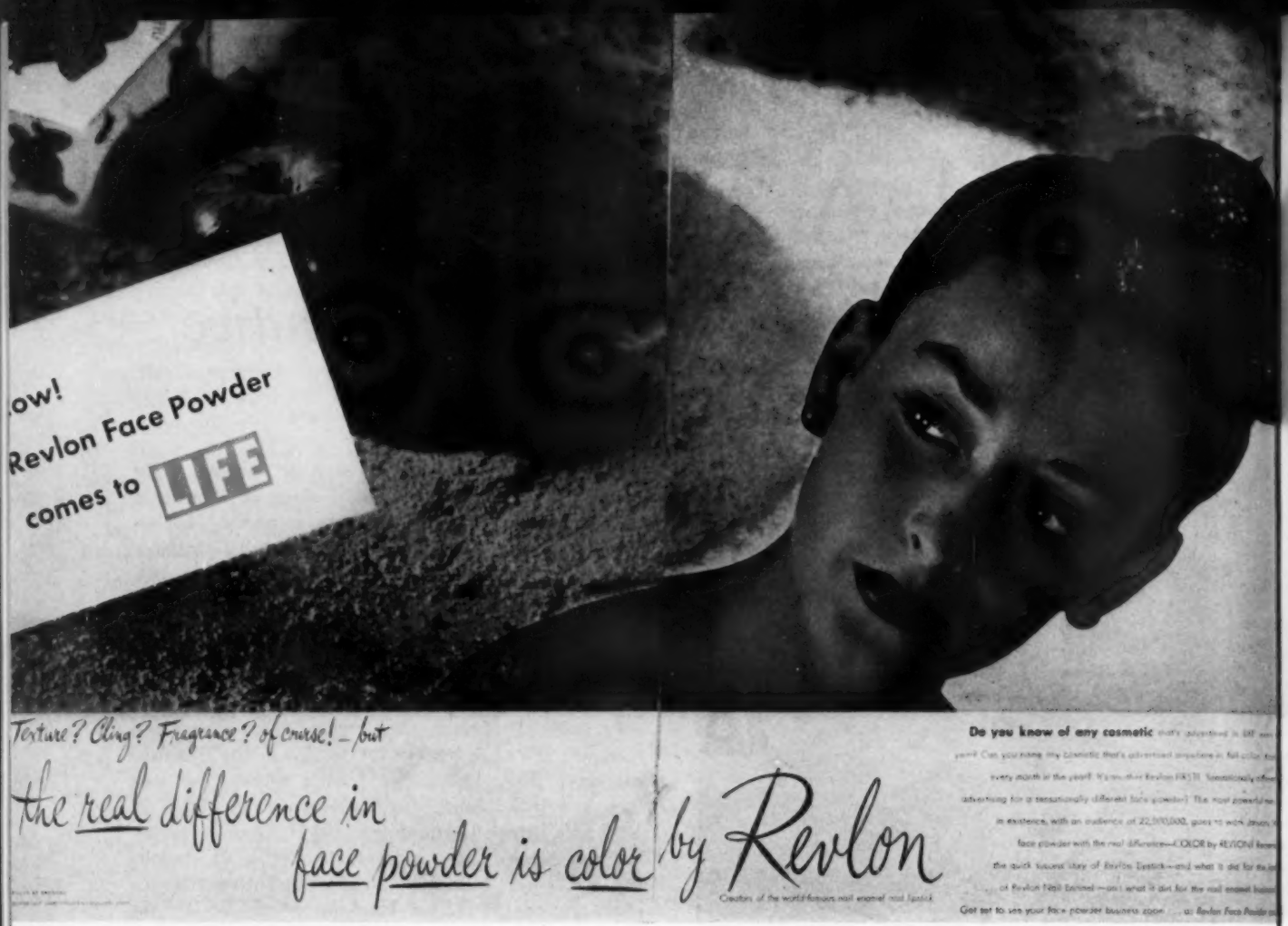
Dr. Dunning has always been a student. He graduated from the Maryland College of Pharmacy in 1897 and then took postgraduate courses in chemistry at the famed Johns Hopkins University. Affable Brown Dunning has long had a keen interest in supporting and improving education. His earnest efforts have been richly rewarded with honorary doctorates from the University of Maryland, Washington College and Johns Hopkins, the most prized of which is the LL.D. of Johns Hopkins.

In 1898, Dr. Dunning interrupted his business and academic life to volunteer for service in the Spanish-American War. He enlisted as a private but was soon a Top Sergeant. On his return to the U. S. in 1899 able Brown Dunning rejoined Hynson, Westcott. He also carried on post-graduate studies in chemistry and later undertook some cooperative research investigations at Johns Hopkins which led to the development of Phenolsulphonphthalein and Mercurochrome.

Shortly after Dunning's return from war service, he was put in charge of the prescription department and manufacturing laboratory of Hynson, Westcott. Somehow he also found time to do a little teaching at the University of Maryland. About 1910 hard-driving H. B. Dunning saw an opportunity for Hynson, Westcott if they would invest in building up a manufacturing specialty business. He set to work to prepare a number of improved compounds and mixtures. It was not long before his products attracted widespread attention and comment. It was around this time that two of Johns Hopkins top-flight diagnosticians, Rowntree and Geraghty, were searching for a safe and effective dye to carry on kidney function tests. They had been successful in finding a dye which met their specifications, but the process of manufacture was long, tedious and dangerous. The Hopkins investigators came to Dr. Dunning for assistance. It was he who worked out and perfected the commercial process for manufacturing the valuable diagnostic dye we all know as Phenolsulphonphthalein. Dr. Dunning's success gave Hynson & Westcott the stimulant that was needed to convince them of the desirability of entering pharmaceutical manufacture in dead earnest.

H. A. B. Dunning continued his research in cooperation with the Johns Hopkins group. He spent con-

(Continued on page 440)


ow!
Revlon Face Powder
comes to LIFE
Texture? Cling? Fragrance? of course! - but
the real difference in
face powder is color
by Revlon
Creators of the world-famous nail enamel and lipstick
Do you know of any cosmetic

ADVERTISING ADVERTISING*

RETAILERS have for years been deluged with advertising about advertising. They have been slugged through the mail, by salesmen and in trade advertising, by broadsides, brochures and sales portfolios. They have been told how the advertising for brand X is reaching millions of customers through countless insertions in a bewildering array of magazines and other media. Statistics have made them intimately familiar with the number of families in their town, county and state, the number of automobiles, telephones, taxes paid, etc. Not even an Einstein could emerge from this deluge of advertising arithmetic without a strong feeling of confusion.

But retailers learned long ago, not to barricade their stores from the promised rush of eager customers; they have even learned that flamboyant advertising promises are not always kept. And they have grown very often, rather weary of statistics, charts and figures.

The retailer is not unsold on national advertising. No one knows better than he that national advertising sells some of the goods in his own store and makes it a lot easier for him to sell much more. But he simply can't keep up with the advertising procession, for all the brands he stocks, and the result is a rather weird conglomeration of impressions on brand advertising—impressions in many stores (big ones, too) that would shock some large advertisers and be quite pleasant news to some small ones.

In spite of the importance of properly merchandising

*By Peter Vautin

consumer advertising to the retailer, buyer, merchandise manager, store owner, sales clerks, to which every advertiser and advertising agency will promptly agree, it must be admitted that there has been less advance in technique here than in any other branch of advertising. It may even be admitted that too many advertising agencies and advertisers fail to give more than lip service to the idea, toss off a salesman's portfolio, a trade insertion, with little conception of how vitally the entire consumer program can be affected by the retail attitude toward this advertising.

Retailers acquire, largely subconsciously, an expectation of demand for each product. This may be founded on past performance in his own store, on what he hears or thinks is happening in other stores, on his faith in or liking for the product, certainly on the opinion he has arrived at regarding the extent and character of the advertising. This in turn influences him in his window and counter displays, his willingness to cooperate in promotions, his attitude toward customers.

The purpose of merchandising consumer advertising to the retailer is not merely to appraise him that this magnificent campaign is about to operate. It is to build up in his mind, to the highest possible pitch, an expectation of consumer demand and consumer interest, and to keep it there.

This selling job to the retailer is the province of the salesman, with portfolio, reprints, other material, or direct mail or the trade magazine.

The salesman has the advantage of direct contact with the buyer or store owner. But he operates under many handicaps. His time may be limited for many reasons, including the buyer's interest. Once told, no matter how incompletely, he rarely can give a repeat performance, at least not with the same portfolio; he seldom can tell the story to other store executives or to sales clerks. More important, when a company has been established as an advertiser he more and more runs into the phrase "What the hell, Bill, I know you folks are advertising." Salesmen, many of them, could write a very revealing story which could be called "Why I leave my portfolio in my car."

Direct mail has the disadvantage that it reaches one person, that it lacks buy appeal, and rarely, on this subject, can reach sustained interest in a series.

Together with the business announcement, the advertising of advertising is the primary function of the retail trade magazine. Most of them provide wide coverage of the trade and within the store. They can be used naturally, for a repeated impression, when skillfully told. But, it must seem obvious to anyone who will take the time to study this kind of advertising in the retail magazines that one of two things are true:

1. That not many advertising agencies and advertisers (including big ones) have given even a fraction of the study to develop an understanding and technique for this kind of advertising that they have given to consumer copy. Or—

2. If some people in the agency do know, they have turned this essential copy over to some youngster who hasn't been told about this technique.

In a recent issue of Beauty Fashion, an advertiser well-known throughout the industry for his integrity and for the length of time he has been in business, used a color page to advertise his consumer advertising. It was a very beautiful page in art work and layout. But it came pretty near taking the cake as the advertisement which should never be run. One-half of the page showed a reproduction of a consumer advertisement, leaving the other half white space for a brief advertising story based on the program of six magazines, which were mentioned. On examining this advertisement two things should be considered.

1. Anyone in a retail store, looking through a trade magazine, gets a quick impression of advertising—they rarely stop to analyze.

2. Retailers have heard for so long, and hear continually, such enthusiastic stories about advertising, that they tend to exaggerate any brand advertising in their own mind.

What happened in many retail stores, among many buyers and salesgirls as they glanced at this advertisement can certainly be summed up in the words of one buyer to whom it was casually shown, "Nice ad, so they're using half pages this year, I had an idea they were bigger advertisers—used more magazines."

When you display a consumer advertisement in a trade magazine, show it the way you want the trade to remember it. Don't sell your consumer advertising short to the retailer or sales clerks.

About once a year many agencies and advertisers think that the traditional, the correct thing to do, is to list consumer media. Or maybe anytime, when stuck for an idea for trade copy, production calls the account executive, who yells, "My God, closing date again on that damn trade paper, call up copy and tell them to whip up a layout and list the consumer media."

In spite of this accepted advertising ritual, so often casually and traditionally handled, such an advertisement is a delicate and difficult one to handle for maximum effect, often a dangerous one for the reason that we are dealing here with impressions, often fleeting impressions.

We have seen that limiting the mental impression of the size of the space can reduce in the retailers' mind the expected effect or help from the advertising. So too a listing of magazines can limit the scope of advertising in his mind to less than he had assumed it would be.

On the other hand, can we expect an effective treatment of such advertising through the form most frequently used—the reproduction of the full consumer page, with a long list of media in upper or lower margin? Not if tests mean anything, and this one probably does because it parallels many easier tests of brand or company recognition in connection with a series of advertisements. Twenty-four department store toiletries buyers were each asked to read carefully a list of consumer magazines, listed on the margin of three consumer

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DIABETIC SPECIALTIES

By M. A. LESSER

DIABETES is probably one of the most thoroughly studied and scientifically treated of all diseases. It is a condition in which spectacular strides have been made during the last few decades. Not only are the victims of diabetes mellitus able to live nearly normal lives, but they also often live longer than others because they have had to learn how to take care of themselves. Of course, insulin has been the major factor in this picture, but the availability of a variety of specialty drug products has contributed materially to the diabetics' well-being and comfort.

Despite scientific advances, or even because of them, diabetes is actually on the increase in the United States. This is quite understandable when it is remembered that, generally speaking, diabetes is essentially a disease of middle and old age.[1] With the increasing conquest of infectious diseases, plus other factors contributing to longevity, more people reach the age where they are likely to acquire the disease. Better diagnostic methods, as well as a more general knowledge of the early symptoms of the disease, have uncovered cases that formerly went undetected.[2]

Figures on the incidence and future outlook of the disease vary somewhat. It has been estimated that nearly one person of every hundred suffers from diabetes and that more than two out of every hundred will develop it before they die.[3] More conservative figures indicate that there are about 700,000 diabetics in this country and that about two million people now living will develop diabetes. According to Lloyd,[4] it is not unlikely that the present number of diabetics will be doubled within the next three decades. This is further emphasized by Joslin's[5] observation that in 1900, diabetes ranked twenty-seventh as a cause of death, that it is now in ninth place, and that, with the current trend, it will become the fifth leading cause of mortality.

The bright side of the picture is the fact that during the past thirty years the life of the adult diabetic has been more than doubled. Children now rarely die of the disease and the life expectancy of the child diabetic has been greatly extended. These results have been achieved because diabetics can be taught to live with their conditions and because they have been provided with the materials essential to their new life.

As yet there is little evidence to dispute the saying, "Once a diabetic, always a diabetic." It is a chronic disease, with an average of twenty years duration.[4] Hence it becomes obvious that to supply the needs of the large and growing number of people with diabetes, the pharmaceutical manufacturer must be ready to provide a variety of products specifically designed to meet a particular need.[6]

Of course, insulin is the most important specialty required by the diabetic. "The discovery of insulin was wonderful," says Joslin,[5] "because it allows children to live, it prolonged the duration of life of diabetics three-fold, it allowed them to work with vigor and courage and support themselves." A replacement therapy for something the body cannot adequately produce, insulin makes it possible for severe diabetics to remain free of glycosuria and to retain good mental and physical vigor. A specific, when properly employed, in the treatment of diabetic coma and acidosis, insulin is also of great value in managing diabetic patients undergoing surgery and those with complicating infectious diseases.[7]

Contrary to what many people believe, insulin is not employed in all cases of diabetes. Rather, it is indicated in those instances where control cannot be achieved by diebetic treatment. Another false view still held by many people is that the use of insulin permits the diabetic to eat everything at will. On the contrary, diebetic control looms even more important during insulin therapy. Moreover, there is no such thing as an average dose of insulin for diabetics, each patient must be considered and treated individually. It is true, however, that diabetic patients regularly show a reduction in insulin need with the passage of months of adequate control. Eventually a basic level is reached requiring no change unless infection or other intercurrent disease upsets the established balance.[8]

In addition to regular insulin, a rather large number of new modifications have been developed during recent years. These include protamine zinc insulin, crystalline zinc insulin, globin insulin, histone zinc insulin, and buffered and unbuffered combinations of insulin and protamine zinc insulin. The possibilities for other modifications are practically unlimited, according to Peck[9]; including such widely different modifying agents as colloids, lipoids, organic and inorganic compounds, dyes, and the basic protein precipitants like the numerous protamines and histones. Some of these

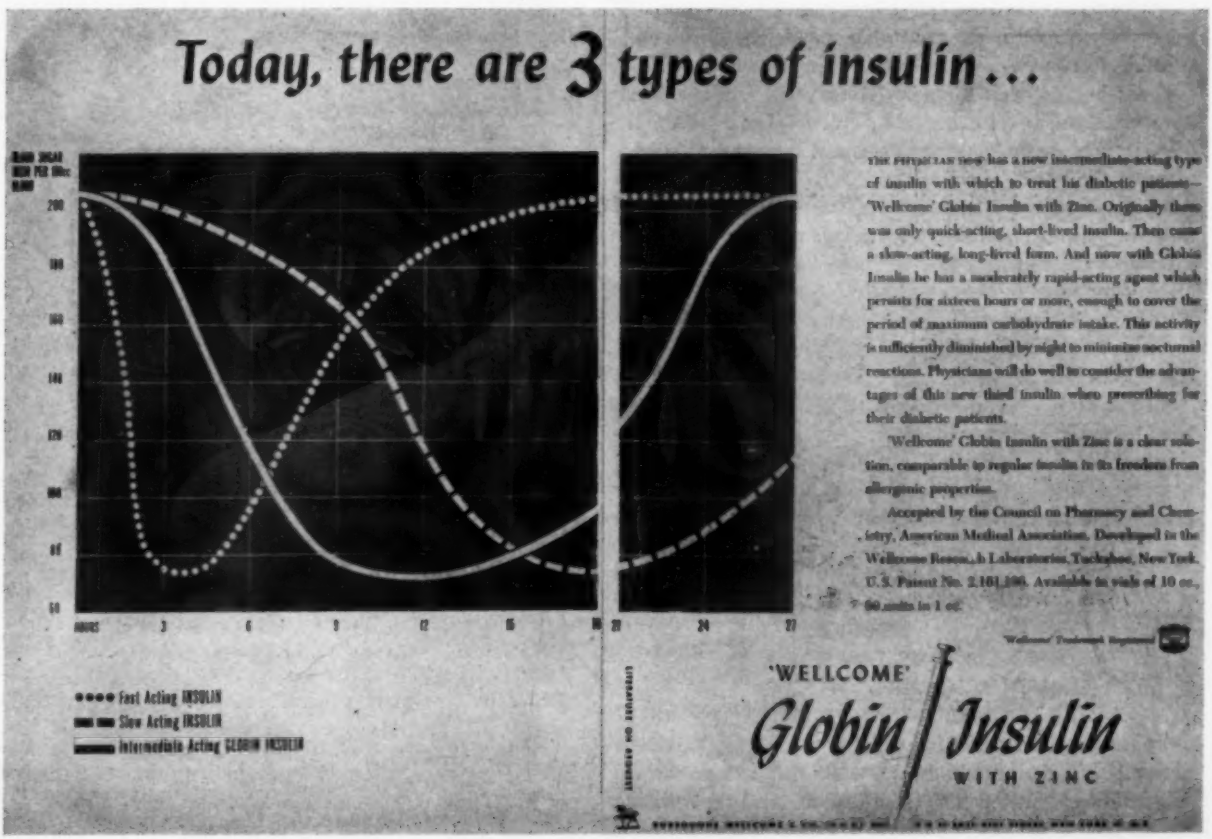
modifications have been studied clinically and a few have even been marketed in Europe.

In spite of this considerable work, only four types of insulin find general acceptance and wide use in the United States. These include regular insulin, protamine zinc insulin, crystalline zinc insulin and globin insulin. All serve to control blood sugar levels, but the speed and duration of their action differs. Regular or unmodified insulin, sometimes called "quick acting" insulin, reaches its maximal effects in from two to three hours, while protamine zinc insulin, or "slow acting" insulin has a prolonged blood-sugar-lowering action that has its greatest effect in about twelve to twenty-four hours after injection. Globin insulin, the most recently accepted of this group, has an action intermediate between the other two forms. Because of its chemical purity, crystalline zinc insulin is especially useful for diabetics who show allergic reactions to other forms.

An important aim in the study of diabetes is to provide a modified insulin which, if given in a sufficient quantity in one injection (in conjunction with an adequate diet), would maintain the blood sugar within normal limits for a period of twenty-four hours.[10] Although work along these lines is going forward constantly, it has been found that smooth, prolonged effects can be obtained by the combined use of quick-acting and slow-acting insulin. Many authorities[9, 11, 12, 13] advise a single daily injection of a suitable syringe mixture of regular insulin and protamine zinc insulin. However, others[5, 14] feel that the separate administration of two types of insulin gives better results and is less confusing to the patient.

The diabetic diet and the insulin dosage are regulated by the physician on the basis of blood sugar determinations and other appropriate clinical tests. Between visits, and especially during periods of adjustment, the diabetic keeps a check on himself by testing for sugar in the urine. Qualitative tests on these urine specimens serve as a guide to the size and distribution of insulin doses and sometimes suggest a readjustment of the diet.[15] Diabetic patients must learn a method of making such tests and of interpreting the results. A number of simple, rather ingenious test kits have been developed for this purpose.[16, 17, 18] Nonetheless, the simple test-tube procedure based on Benedict's quantitative solution remains the most widely used method for determining sugar in the urine. Almost all large pharmaceutical houses stock this solution as a regular item. Some idea of the volume used may be determined from Stoklosa's[19] observation that one New England hospital used an average of 600 gallons of Benedict's qualitative solution annually.

The method for preparing this solution and making the test is available in clinical laboratory manuals, biochemistry tests and other sources. The formula is also available in the "National Formulary." Most texts written for the guidance of the diabetic likewise explain how to make the test.



Ailments and infections which a normal individual can combat without too much difficulty, loom as major hazards to the diabetic. As remarked by Lyon,[20] "a simple catarrh, a root abscess, or a few boils may cause a return of sugar, a tonsillitis or a carbuncle may produce a profound disturbance, while pneumonia must be regarded as a very grave danger . . . Chronic infections are serious complications."

Obviously, when a diabetic becomes ill he requires medication to combat this added menace. It is also obvious that many of the medicinal preparations, especially those in liquid form, which are quite satisfactory for the normal individual are unsuited for treating the person with diabetes. It is true that the quantity of sugar or other forms of carbohydrates in or on pills and medicated powders is so insignificant as to be considered negligible. Hence medicaments of this type may be employed in most cases without significantly effecting the blood sugar levels. This, however, does not hold for various liquid medicines in which sugar is sometimes present in large amounts.[21]

Nonetheless there is no reason why the diabetic should be further penalized for his condition by being forced to take unpleasant-tasting, often nauseating medicaments. It is pointed out by Crossen[22] that special foods, pastries and even candies have been made available to contribute their share toward making the existence of the diabetic as pleasant and as free from danger as possible. He feels that the same can be done in the case of medicaments. He cites the fact that certain pharmaceutical specialty houses have gone out of their way to provide palatable medicinal products suitable to the particular needs of the diabetic.

Crossen goes even further. He describes in detail a number of sugar-free, but palatable vehicles in which a variety of drugs may be dispensed in pleasant form to meet the needs of the diabetic. Representing modifications of official liquid vehicles, these special combinations employ familiar flavoring agents, but use saccharin instead of sugar to impart sweetness. Glycerine is included in many of these formulas not only for its ability to improve solvent action and miscibility, but also for its not insignificant "bodying" and sweetening effects.

Because the several proposed vehicles have since been incorporated into the new edition of the "Pharmaceutical Recipe Book,"[23] one example will suffice to illustrate these preparations. Thus, a useful sugar-free aromatic elixir can be made from:

Compound spirit of orange	**12.00 cc.**
Soluble saccharin	**0.60 Gm.**
Purified talcum	**30.00 Gm.**
Alcohol	**250.00 cc.**
Glycerine	**250.00 cc.**
Distilled water, to make	**1,000.00 cc.**

Triturate the spirit of orange with the talcum until thoroughly distributed. Mix the alcohol and glycerine with sufficient water to make 1,000 cc., and slowly add to the powder with continued stirring. Shake intermittently during about fifteen minutes and then allow to stand for 24 hours. Filter and dissolve the saccharin in the clear filtrate.

Like other people, diabetics are susceptible to coughs and colds and hence require medication to ease the condition and hasten recovery. Since most liquid products for this purpose often contain substantial quantities of sugar or syrup, a number of specially prepared mixtures have been devised for the diabetic. Indicative is a sugar-free modification of the familiar elixir of terpin hydrate[22, 23]; the average dose being 4 cc. or one fluidrachm:

Terpin hydrate	**17.0 Gm**
Tincture of sweet orange peel	**20.0 cc.**
Spirit of bitter almond	**5.0 cc.**
Saccharin	**0.2 Gm.**
Alcohol	**425.0 cc.**
Glycerine	**400.0 cc.**
Distilled water, to make	**1,000.0 cc.**

As an aid in suppressing a dry, useless cough in diabetic patients, Hruby[24] suggests the use of a teaspoonful in water every two to four hours as required of the following prescription:

Codeine phosphate	**0.250 Gm.**
Saccharin	**0.015 Gm.**
Glycerine	**2.000 cc.**
Water, to make	**60.000 cc.**

A more rounded diabetic cough syrup, said[23] to originate in a large Western hospital, has an average dose of 4 cc. and is made from:

Codeine phosphate	**2.0 Gm.**
Chloroform	**5.0 cc.**
Citric acid	**12.0 Gm.**
Sodium citrate	**41.0 Gm.**
Cherry fruit essense	**17.0 cc.**
Saccharin	**0.6 Gm.**
Distilled water, to make	**1,000.0 cc.**

Where an expectorant action is desired to relieve and loosen a tight cough, preparations containing ammonium chloride are frequently prescribed.[25] Diabetic cough mixtures containing this salt have been described by Steklosa[26] and by Lascoff.[27] The latter's preparation, to be given in one teaspoonful doses every 3 to 4 hours, consists of:

Soluble saccharin	**0.12**
Oil of peppermint	**0.30**
Ammonium chloride	**5.00**
Powdered acacia	**15.00**
Fluidextract of sarsaparilla	**8.00**
Glycerine	**10.00**
Chloroform	**0.75**
Distilled water, to make	**120.00**

The combined action of ammonium chloride and codeine may be obtained for diabetic patients by the use of the following solution, in 4 to 8 cc. doses:[23, 28]

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BLACK STAR

Consumer Testing*

THE Journal of General Psychology, in a recent issue, poses a problem which has long been a familiar one to this industry, but which has received little attention beyond curious recognition that such things actually do happen. Sixty-nine girl students at the University of California smelled six different perfumes in a test to determine whether a relatively high-priced perfume was any more desired than a much lower-priced one. Slightly more than half of the girls (56 per cent) preferred a lilac valued at $16 an ounce to a 50 cent brand of lilac. However, gardenia at 50 cents won 55 per cent preference over an $8 brand. Apple blossom did a little better, the more expensive brand winning a 60 per cent preference.

Dr. Jewitt, who made the test, in which price and identity were not revealed, therefore arrived at the conclusion that there is no consistent relationship between the price of the perfume and the preference of the lady.

Now it would seem to us that other conclusions could be more reasonably arrived at, as for example:

1. That this particular group of girls was not very long on discriminating taste, or
2. That differences in perfume quality are an illusion, and
3. That price bears little relation to quality.

There is little need in this publication to give much space to a discussion of price and quality of perfumes. The industry is intimately aware that lilac, gardenia, or apple blossom can be made to sell at Woolworth prices merely by a proper selection of synthetics and other chemicals, or they can be made to sell at more than $16 an ounce by a liberal use of flower absolutes and other costly essential oils and aromatic chemicals. The industry knows perfectly well that jasmin simulations are listed in every essential oil price list in a range of prices around $40 a pound and that French perfumers in Paris are now paying over $4,000 a pound for absolute jasmin.

That price must play a part in sales psychology it would be foolish to deny. Price too often plays its part in the restaurants in which we eat, in the neighborhoods in which we live, in the clothes which we wear, to deny its sales value. But to say that price bears little relationship to quality is to deny the facts of commercial experience. Price usually determines the quality. Price and market may be the first factors decided upon for a

*By Peter Vautin

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Protection for Personnel and Product

By H. G. CLUM
The Art Metal Company, Cleveland, Ohio

WHEN a drug manufacturer, for his every day production, depends upon a few highly trained people and a lot of special equipment, it is vital that the protection of both personnel and product be plant-wide.

At the E. W. Rose Company in Cleveland, twelve employees control a whole production line comprised of modern mixers, electrically heated filling units, package conveyor systems and sealing machines. In the compounding, processing and packaging of two principal products, Zemo lotion and Zemo ointment, every employee is a key worker. One ill or absent employee is not too serious but more might easily create a critical production problem. Even so ordinary an infection as the common cold, therefore, must be prevented and the incidence of cross infection controlled by all possible means.

As every packaged-drug processor knows, contamination of the product aslo can comprise a real problem. Even though as at the E. W. Rose Company, the process is almost completely automatic, the packages

hot-filled and machine-sealed, the product inevitably is exposed to air-borne viruses and mold spores as well as bacteria.

So, to a scrupulously clean plant, E. W. Rose, president of the company which bears his name, has added plant-wide protection against air-borne organisms. Shown in the pictures which border these pages is a complete installation of ultraviolet germicidal equipment lamped with germicidal tubes.*

The process of manufacturing Zemo begins on the third floor of the plant at 1750 East 27th Street. Here materials not only are carefully weighed, measured and compounded, but are protected by the ultraviolet germicidal unit which appears in our first picture. In the laboratory shown in illustration No. 2, where a continuing series of tests always is in process, other germicidal units irradiate the upper air to prevent cross-infection and the incidence of air-borne diseases and make certain that samples tested are free from contamination by air-borne spores and fungi. Air, in constant circulation, carries past the germicidal units often enough to accomplish the equivalent of 100 complete air changes per hour.

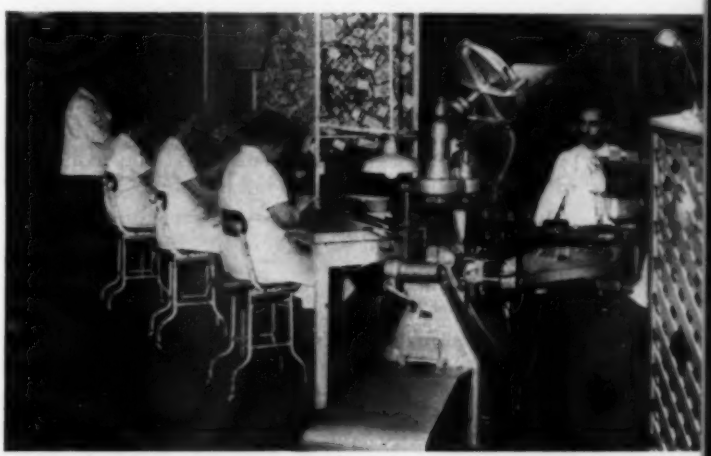
From the mixers of the third floor, the product passes along to the processing plant on the second floor. Here a modern conveyor system has been hooded to house the germicidal lamps needed to irradiate the packaged product. The third of our illustrations shows a series of staggered flanges which slows the passage of the product until it reaches the end of the conveyor system shown in the fourth Zemo picture. The jars of ointment are hot-filled and sterilized by ultraviolet action before the tops are put on.

Zemo liquid is handled in another section of the processing plant. Here, too, freedom from air-borne bacteria, viruses and spores is assured by the use of upper air irradiation. Shown in the fifth of our illustrations is a combination operation for bottling and labeling. Just above and behind the cage in the foreground, which puts packages at the operator's hand, is a suspended germicidal unit to free the area from air-borne bacteria.

From the processing plant on the second floor, the product goes to a shipping room on the street level. Here packaging has been completed and our sixth illustration shows a one-day's supply of Zemo ointment and lotion ready for the trucks that carry it to the freight yards. The street floor, too, is protected by ultraviolet units in the principal offices.

Here, in a small plant at the very top of its class in methods and efficiency, is a formula for all-plant laboratory control, all plant protection for personnel and product. As Mr. Rose says, "Despite adverse climatic conditions in many of the areas in which we have recently shipped Zemo ointment and lotion, there has been no evidence of product contamiantion. Ultraviolet germicidal equipment has not only protected our products, but our personnel has lost an absolute minimum of time as the result of respiratory infections. Our germicidal installation, which has been in operation for almost two years, has proven not only efficient but extremely economical.

* General Electric Disinfectaire



THE ESTROGENS

MANUFACTURERS of both drugs and cosmetics have been interested in the situation surrounding the use and sale of estrogens or female sex hormones. The term "natural" as applied to some of the products of this classification has been objected to by the Food and Drug Administration. The Revision Committee of the U. S. Pharmacopoeia has been busy in an attempt to include additional monographs covering these products so that a complete array of official standards will be available.

One of the principal complaints of the FDA regarding these products is in the description of estradiol as a "natural" estrogen. It is true that estradiol is present in the urine of pregnant mares, and therefore it is a product that does occur naturally. The percentage of estradiol in the urine can vary from 10 per cent to 47 per cent depending on the source and the month in which it is collected, but generally the estradiol present is much smaller than the estrone present which can vary in amount from 52 per cent to 90 per cent for the same reasons.

Since estradiol is six times as potent physiologically as estrone, and since estradiol can be made from estrone by hydrogenation, there has existed a tendency to increase the amount of estradiol available by this artificial method. And since estradiol is a natural component of the urine of pregnant mares and of the total estrogens recovered from this urine, this product has at times found its way into finished products which were labeled as containing "natural" estrogens. Thus multiplying the potency of an estrogen by a relatively simple chemical process and then labeling the product as "natural" has been branded by the FDA as an "economic cheat." The FDA is perfectly willing that estradiol recovered from urine as estradiol be labeled "natural." How one can differentiate between natural estradiol and estradiol made by hydrogenating estrone is something else again, but still the FDA has expressed itself and is willing to stick by its guns.

The situation is further complicated by the fact that conversion of estrone into estradiol is a reversible process, that is, estradiol can also be converted into estrone and this occurs naturally in the body. It is stated that much of the estradiol present in the ovaries is converted into estrone when it reaches the urine. Likewise, it is claimed that when estrone is injected into the body it is at least partially converted into estradiol.

As with all natural substances, bio-assay has been the principal method of evaluating the potency of estrogenic substances. However, when the total estrogen was broken down into its many components—estrone, estradiol, estriol, equiline, and equilinine, chemical consideration entered the picture. A breakdown of the total estrogens obtained from the urine is necessary for a proper understanding of the subject.

The total estrogens are composed of estrone, which, as stated above, can vary from 52 to 90 per cent of the total depending on the source and the month collected. This substance can be labeled as a "natural" estrogen. When isolated in crystalline form with a melting point of from 258° C. to 268° C. it is the standard by which all estrogens are measured, one gram being equivalent to 10 million International Units. Estradiol, as stated above, varies from 10 to 47 per cent of the total depending on the source and the month collected. This, when recovered as estradiol from the urine can be labeled as a "natural" estrogen.

There are two other parts of the estrogen, one being the phenols and other residues and impurities having inert activity. These substances are irritating on injection and have a strong odor. The other part is composed of equiline, equilinine, and estriol—non-ketonic fractions with little potency, only one to two per cent of the activity being due to these substances. These two parts, together with the estradiol present, make up the non-ketonic fraction of estrogen. This has a strong odor of urine and is also referred to as the mother liquor or the residue of total tar.

The dispute between the FDA and manufacturers who labeled their products as containing "natural" estrogens while containing estradiol obtained by hydrogenation of estrone arose from the contention on the part of the manufacturers involved that these products were not "synthetic" since they were the same thing that occurred naturally in the urine of pregnant mares although all of the estradiol used was not originally in that form in the urine. These manufacturers thought

Natural Estrogen consists of:

1. Phenols and other residues and impurities having strong odor and irritating on injection.
2. Equiline, equilinine, and estriol—non-ketonic fractions with little potency, only one to two per cent of activity being due to these substances.
3. Estradiol—can vary from 10 to 47 per cent in activity in total tar and extracted from ovary.
4. Estrone—content can vary from 52 to 90 per cent of activity in international units depending on the source and the month collected. This substance may be labeled "natural estrogen." When isolated in crystalline form with melting point of 258° to 268° it is the standard by which all estrogens are measured. One gram is equivalent to 10 million international units.

1, 2, and 3. These components together compose the non-ketonic fraction of estrogen, being also referred to as the mother liquor or residue of the total tar. This part has a strong odor of urine.

that they should be allowed to use the term "natural" because there is a product that is always termed "synthetic" because it does not occur in the urine at all but is synthetically produced to give the same effects as the natural estrogens. This product is diethylstilbestrol, commonly referred to as stilbestrol. This is defined in Merck's Index as "a synthetic estrogen," and the Index states further: "Use: It has the action of estrone (theelin) but is several times as potent, and is claimed to be capable of replacing the natural hormone in every way."

Due to the fact that stilbestrol is synthetically produced by chemical processes, it is much cheaper than natural estrone and also much cheaper than estradiol recovered directly from the urine or produced by hydrogenating estrone recovered from the urine. Therefore, so far as the FDA is concerned, the labeling controversy is one of truth as to sources because of the varying values of products from various sources. There are many who insist on the natural products because they maintain that they are more desirable in use. The FDA is determined to see that these people get what they want and they are not cheated by paying higher prices for something that they do not want.

As the use of the estrogens increases, the synthetic product would naturally tend to decrease in price for the reason that synthetic costs decrease as volume increases and as plants are amortized and processes improved. However, if demand of the natural estrogens and their components increase, costs will probably rise due to the fact that supplies are limited. Increased supplies of natural estrogens can probably be obtained, but the cost of collection and shipping might be greater than the supplies now being received. The choice between the natural and the synthetic might, to a considerable degree, be affected by the difference in cost of the two, always considering the relative merit of both types as evaluated by the doctors who prescribe them.

A steadily expanding market for the estrogens is anticipated for some time as the benefits to be derived from their use are more widely appreciated. As women consult the physicians to a greater extent due to high national income at the present time, and due to the extension of sickness insurance—either voluntary or compulsory—in the future, a much greater number of them will be treated with estrogens for conditions that are peculiar to women. Also the estrogens, alone and in combination with the male sex hormone—are being used in the correction of many other conditions that occur in both men and women.

As the hormones in general are being further investigated, their proper places in therapy are being revealed. And as their proper uses are uncovered, demand sets in and increased supplies are required. Whether sufficient supplies of the various hormones will come from natural or synthetic sources is something that cannot be answered at the present time. However, the source of supply will be based upon supply and demand and relative cost of natural and synthetic products. Certainly insulin is an example of a very widely used hormone that comes solely from natural sources. Here the collection of the pancreas is well organized and supplies are sufficient to fulfill the demand. The patent on the original process has expired and the product is now on a price basis involving only the actual cost of the raw materials, the manufacturing and distributing costs plus a normal profit.

DODGE MILBOSSED-TOP CORKS

Put Your Name on Top

IN the best places — the retailer's shelf, the consumer's home — Dodge Milbossed-Top Corks can say something nice about your product. Your name, your brand, your trade mark, embossed on these distinctively designed closures, is an effective way of displaying your package. Too, they are available in a broad range of sizes and colors.

Dodge Milbossed-Top Corks are thoroughly dependable. They provide a perfect, air-tight seal of natural cork . . . and the sturdy, hardwood tops won't crack or break off. Quick! . . . a gentle turn of the wrist and it's open. No corkscrew. No jabbing or picking.

What is your sealing problem? Dodge can supply the answer. Four generations of cork manufacturing experience qualifies Dodge to be your closure consultant. Put your name on a top-notch top. Write or wire Dodge today.

DODGE CORK COMPANY, INC., LANCASTER, PA.

Dodge Taper Corks are available in a wide range of sizes and shapes to fit all standard shape bottles. Exceptionally uniform and dependable, these corks are recommended where "eye appeal" and easy removal are of secondary importance. Send us your specifications.

News About Delivery—While not yet up to standard, deliveries are improving rapidly. Therefore, it is wise to contact us immediately.

DODGE CORK Closures

Designed to Guard the Integrity of the Contents

Packaging and Selling

Demonstrators

Although the demonstrator system has been under fire since 1937 when the Federal Trade Commission charged violation of the Robinson-Patman Act, there have been no noticeable signs that cosmetic manufacturers were giving any thought to the matter until comparatively recently. Now that a decision, and presumably an adverse decision is expected from the Supreme Court during the spring term, or at the very latest, in the fall term, there are signs and sounds of activity.

It is difficult to estimate just what volume of the total cosmetic business would be affected by such a demonstrator ruling. At the trade practice meeting of long, long ago, the lines were about evenly drawn among those manufacturers represented. Generally speaking, it was the treatment lines who wanted demonstrations and the perfume and soap lines which did not. However, the lines were not tightly drawn and the picture has changed some since that time. Perfume companies who felt they were forced into demonstrations, later got so they liked them. And the ranks of the retailers who held out against the system gradually thinned until there were only a few prominent exceptions such as Wanamaker's in Philadelphia and Robinson's in Los Angeles.

Some of the treatment lines, too, are in good shape and don't have to worry. These are the ones which are 100 per cent demonstrated or at least so close to 100 per cent that the accounts on the fringes won't matter. But for the most part, the scramble is on to find some device for retaining the demonstrator and keeping within the law. For nobody who has demonstrations and likes them, plans to give them up simply because the Supreme Court says so. That would be too, too naive.

One device which is being considered is a return to consignment selling. Admittedly this involves a lot of headaches but under it the manufacturer keeps title to the merchandise and can hire his own girl to sell it, provided this is okay with the store.

Another device is to give the retailer a demonstrator allowance, which would be treated as an additional discount and thus paid to all retailers on a proportionately equal basis. Under this system the demonstration cost would presumably be averaged out and a percentage of sale arrived at. This percentage would then be applied to each account in the form of an extra uniform discount of 10 per cent or 7 per cent or whatever the case might be.

A third approach is to rent space from the retailer and pay him an annual fee for this space. This involves difficulties inasmuch as each rental would probably have to be considered as a separate case. But as some sales managers point out, this would not be too bad if, in exchange, the manufacturer was assigned a fixed display or counter space in exchange for the rental. The chief obstacle is arriving at a fair rental figure.

Which brings us to the Saks Fifth Ave. story. Without mentioning Saks by name the N. Y. *Times* described the plas as follows.

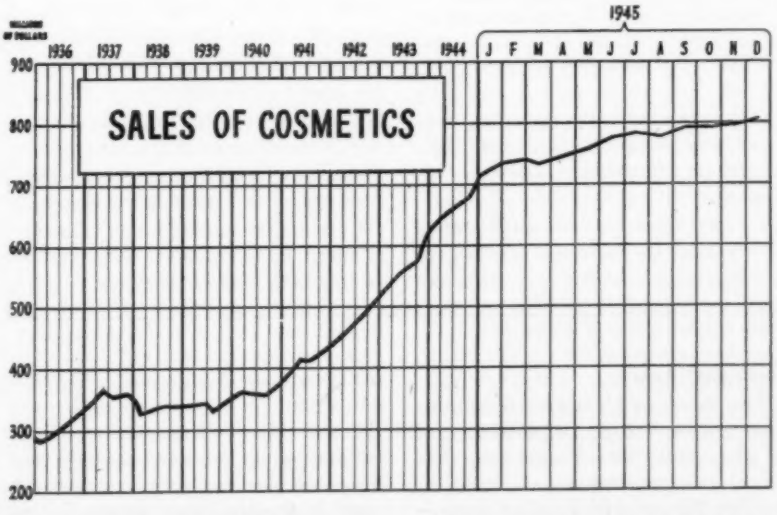
"With a toilet goods department whose sales force is almost completely staffed by manufacturers' demonstrators, the store is said to be planning a complete end to the system. A sales force of its own would be substituted and a sales plan, described as 'a radical departure,' instituted.

"Under it, lipsticks, powder, creams, perfume and other toilet goods would be sold in salon fashion. No displays or counters would be used to merchandise the goods. Instead, the prospective customer would be served by a 'cosmetics expert' and each toilet goods item, such as lipsticks, hand lotions and so forth, would be grouped in separate locations."

This sounds swell and if that were all there was to it, a detached judgment might be that Saks is planning to conduct a worthy experiment of high purpose.

But what the *Times* didn't say is that Saks is attempting to have its cake and eat it too. For Saks reportedly has no intention of trying this experiment, entirely at its own risk. Saks suppliers are, it is said, to be charged a rental of $1000 a foot per year for the privilege of having their merchandise sold by Saks under this new plan.

Set up as it is now, Saks' counters provide about 300 linear feet of counter



Retail sales of cosmetics for the twelve months ended with December 1945 totaled $805,279,000. This compares with $794,241,000 for the twelve months ended with November 1945, and with $707,449,000 for the twelve months ended with December 1944.

space. Multiplied by $1000, this indicates an annual rental of $300,000 collected from manufacturers. If we assume that Saks will need 30 "cosmetic experts" to make this selling method work, then there is an indicated salary of $10,000 per year per girl. If we assume, that Saks has no intention of paying this or even half of this as annual salaries to the "experts," then there would appear to be a generous amount left over to cushion Saks against the shock of any decline from the $1,600,000 sales figure set in 1945.

But the manufacturer, unless he were willing to pay this rent on a proportionately equal basis to all of his accounts, would again be smack up against the Robinson-Patman Act.

Which was where we came in.

Latin-American Drug Market

According to Luis G. Dillon, vice-president of McCann-Erickson, Latin-America depends almost exclusively upon the United States for its pharmaceutical imports, a market worth about $150 million. According to this same source, Latin America has 46,000 doctors, 26,000 dentists, 1,200 veterinarians, 18,000 pharmacists, and 20,000 drug stores.

Back to Consignments?

Orthodox sales managers have condemned loud and long selling by consignment. We hear that at least one large manufacturer has been studying a comprehensive consignment plan in which the retailer will never hold title, act only as sales agent. Advantages are supposed to be exact stock control, no loss of sales from unplanned buying and, could this be true, avoidance of some of the pitfalls in those increasingly ominous words, "proportionately equal terms."

New Sales Technique

Chain stores are on the alert with many plans and ambitions to increase their cosmetic and perfume business and their perfume and cosmetic standing. Some buying departments are really working hard as salesmen to increase the number of class lines in at least their A stores. When the head of a large chain and the department head call on the president of an elite men's line to persuade him to accompany them in a waiting limousine to visit and look over a few of their A stores, we must admit these chain store fellows are pretty doggone serious in their social yearnings.

Packaging Forum

By Josephine von Miklos

AND NOW BABIES . . . . . After the success of many of the young people's lines on the market a number of manufacturers are turning their eyes on style for the infant. Baby Oil, Baby Powder, Baby Lotion have, of course, been sold for many years; but they were considered . . . and with good reason . . . drugs. No great consciousness of style and design has been apparent on the packages for those items and the most important feature of promoting them was to induce confidence in their purity and reliability. Obvious enough, and right enough. If the baby's skin was properly tended, the little cherub didn't really care out of what container his body powder was poured. Nor did he, at the age of six months, know anything about the psychology of color, shape, design and ornament.

But nurses care, and so do mothers. They should, too. With all the meticulous attention the crib gets, the color scheme of the nursery, the shade of baby pink or baby blue for blankets, bibs and robes and shirts and what-have-you, why should the baby's bath corner or "dressing table" be less pretty and inviting than the rest of his surroundings? Too, what lovely gifts could be conceived for the mother of new-born babies, if we had sets that were not only practical but also good looking? Finally, there seems to be sound psychology in trying to make mother's or nurse's chore of oiling, powdering and smearing Junior's . . . . well, you know what . . . . less of a drudgery by inventing containers which are easier to use, and much, much prettier to behold.

The question has been raised whether the average mother or nurse might not feel less confidence in baby cosmetics if they were given special design attention. Whether mother or nurse would feel the product which is all important would be as reliable as it has been before, when it was dressed like a medicine.

Well, perhaps at the beginning, a few conservative women might feel that way. But if in re-designing old and well known baby lines, special promotional attention were given to the fact that the products are the same and only the dress is improved, for no other reason than to enhance the product, some of the initial reluctance of certain consumers might be easily overcome. In the case of new baby lines, a well designed series of containers and packages would ride along on the basic advertising and promotional schemes which will have to be devised in any case, good or bad or indifferent design. And it seems logical that a manufacturer newly venturing forth into this market would have a much better chance for success if his merchandise were to appeal to the inherent sense of style of the vast public of mothers.

Design themes and decorations? PLEASE no bunnies. A baby doesn't really care whether a talc tube has elephants on it or whatever else we might think is meant for babies. The Babies, let's remember, are not using these things themselves, but grown up people are. We know that electric trains are primarily gifts for Father; let's be honest and admit that baby cosmetics are for Mother and Nurse and it makes good sense to design them in such a way that they will look well in a bath room or inside the nursery in which Mother's taste is much more conscious than that of her baby son or daughter.

Packaging Show

The American Management Association, sponsors for the past fifteen years of the Packaging Expositions, has turned to circus-inspired adjectives to describe the greatest show on earth—the 17th Annual Packaging Exposition to be held April 2-5 in the famed Atlantic City Auditorium. By now the total list of exhibitors is over 140 and visitors will behold, "a perfectly colossal array of new products and processes, new machinery and materials used in manufacturing, expediting and improving procedures in packaging, packing and shipping.

The Cosmetic Trend

With the record of an unsually busy Southern resort season to back them up, (toilet counters have raised their seasons' volume as much as 40% over last year) buyers are planning for a similarly active tourist and vacation season for the remainder of the nation. Present planning takes notice of the fact of a late Easter which compresses the usual Mother's Day and Father's Day promotions, plus all of the pre-July Fourth business, within eleven weeks. Stores must do at least 20 per cent of their annual volume during this period to fill their midyear quota of approximately 30 per cent, or slightly better. They are ahead, so far, over last year at an average rate of 10 per cent. Pushing tourist and vacation trade looks promising to most buyers because it makes use of sales outlets which have been neglected during the war years owing to lack of travel facilities and much reduced vacations.

Besides the good showing of the Southern Resorts, it is pointed out that railroads and other transportation agencies will have their first unrestricted year. that more women are unemployed and will make family vacations a possibility, that resort hotels are starting to be booked up for the summer and that the rise in auto registrations indicates a substantial rise in road travel.

Each of these is of definite bearing upon the demand for cosmetics and buyers hope that the industry will make good use of its numerous opportunities.

Top ranking sales prospects are generally given to travel sets, Pullman assemblies, overnight kits and similar more voluminous articles, largely because they have been neglected by the consumers in recent years and their reappearance upon cosmetic counters will be somewhat of a novelty this year. Next in line are the large number of general outdoor cosmetics which may give manufacturers of industrial protectives an opportunity to streamline the introduction of their various war products into the regular cosmetic markets. Some of these preparations have had their try-out already in the South and will find wider acceptance with the coming of summer.

With the return of the week-ending habit hostess' gifts from the toilet goods counters will find more active promotion. This offers the prospect of extending this summers' gift season well beyond the customary Mother's and Father's Day dates. Buyers are planning their gift purchases on the theory that a gift this summer should be a real gift and not just a utility article, masquerading as a gift. Whether they will succeed will depend upon the ability of the cosmetic industry to supply the required type of merchandise.

Soap, Whiskey, Food Plus Cosmetics

Remember around the beginning of the war when big companies were buying little companies right and left even, in some cases, offering to give back the company—or what was left of it—for nothing after the war? Those were the days when quotas were the merchandise, especially a nice big alcohol permit. All good prospects were soon used up and then, after a lull, the rush started to buy perfume and cosmetic companies on the basis of big future earnings. No one, or hardly any one, not even the smallest and newest would sell. Every supply salesman knew someone with vast capital, usually outside the trade, who wanted to buy. It finally got to require too much bookkeeping to try to keep a record of these would-be buyers. Then for a year or two, there was another lull. No one would sell and discouraged buyers died or went somewhere else. Now the wheels seem to be turning again, a few sales or mergers have popped up, a few hesitant bids are being made to sell. Buyers and sellers are both coming around. Perhaps some sellers think this year will be the peak of safety and volume. Some big interests, outside the trade, apparently have their own well-thought-out reasons for wanting to be cosmeticians and perfumers. We can understand the workings of the mind of a big soap manufacturer who wants to join our refined circle but the reasoning of a top whiskey distiller and a top food maker still escapes us.

The Dressmaker—Perfumer Riddle

Which comes first, the perfumer or the dressmaker? Or, should a perfumer be a good dressmaker? Perhaps the next few years will answer these questions which, quietly discussed in inner circles for the last few years, are now breaking out as the choicest subject in perfume cafe society, because American dressmakers—dozens of them from Seventh Avenue and the side streets of the upper fifties—are certainly going to force the issue. There was a time, which few remember, when a perfumer was just that, just as a silversmith is a silversmith. Guerlain and Coty are survivals of this era. Then couturiers discovered that fashion-loving women would readily accept a name famous for fashion creations as a sensitive critic of good perfumes and most of the great names in perfume for nearly twenty years were dressmakers. These were the days when Lanvin, Patou, Lelong, Caron, Chanel and others largely stole the limelight. American dressmakers were slow to pick up the ball, largely, of course, because Paris fashions made hard going for them at this time. Elizabeth Hawes, an early pioneer here, brought out her perfume nearly fifteen years ago, gave it an odd name like 38 or 28 Periwinkles, an odor which one essential oil salesman classified as musty cellar. It had a brief spin of glory with a cocktail party and a column in the "New Yorker." Much later, just before the war, Hattie Carnegie, Lily Dache, John-Frederics entered the list with cautious and uncertain enthusiasm. But something has now persuaded the American fashion dress houses that they will now be accepted as perfumers. The idea is running through the dress trade like a flu epidemic. It must mean these folks really do believe that they can now move in the same social circles with the Paris couturiers and meet them on fairly even ground. Nearly every day brings in word of a new one. The list of new ones soon to appear runs five on Seventh Avenue, six in the Fifties and two miscellaneous ones. It begins to look as if this virus will spread more rapidly than men's toiletries or teen-age cosmetics.

The question to be decided someday, as we started out to say, is whether a perfumer must first prove he can be a good dressmaker, or whether the public will begin to get a little fed up some day with what appears to be the prostitution of the art or profession of perfumery to clothes, hats, furs, etc. and with perfumes as the illegitimate child of an admittedly lovely hat, suit, etc.

What a Surprise!

ONLY last week I worried about what to wear for tonight's date! I saw the most *breathtaking* gown in one of the swankier windows, and I didn't dare imagine it would be mine. Who'd have thought one of Mr. Slowey's ads was to rescue me? Well, it *did:* Its simple message said—*Cash paid for excess stocks of bottles and bottle caps, the kind that waste space uselessly.*

"You see, my boss had piles of bottles and caps lying around that he had no use for. I told him of the ads. He phoned Mr. Slowey, and sold his excess stock immediately!

"Next day I got a swell check, a bonus for alertness! That's how I got this gorgeous gown—and just in time, too! Wait'll Bob sees me in it tonight . . ."

Remember: The Glass Container & Cap Outlet Company buys and sells containers & caps . . . ALL SIZES & QUANTITIES.

glass container & cap outlet co.
876 Broadway
New York 3, N. Y.

*Gown designed by Fred Perlberg, N. Y

***phone:* ALgonquin 4-6066**

Leigh Redesigns

Leigh Perfumes, a division of Shulton, Inc., has completely redesigned its perfume packages and bottles for Risque, Heartbeat, Poetic Dream and Dulcinea. The bottles set in plastic bases have a special stopper to prevent leakage. All that is necessary is to slip the stopper into place, press down gently, and it then seals itself.

Milk Protein Base

Tone Laboratories has introduced Milk-Tone, a cake make-up which according to Tone has eliminated all the drying ingredients, substituting a milk protein base. The new formula comes in a pink and white functional plastic case, and comes in four shades to suit skin coloring. If Tone really has eliminated the drying qualities of most cake make-ups, it really has something!

Explaining Things

Even casual readers are beginning to notice in the advertisements the sign of a day to come. Perhaps it's natural for the overcrowded men's field to start explaining things. In two recent two-page facing advertisements in a trade journal John Hudson Moore, Inc., says:

"This is a frank, public statement of our Sportsman merchandising policy. I believe that the stores who have made possible the position now held by Sportsman grooming essentials are entitled to such a report.

"A policy of highly selective distribution was established with the introduction of Sportsman. I have increasing faith in this policy."

Alfred D. McKelvy Company says: "We will restrict distribution of Seaforth products to carefully selected prestige stores."

Double Header

Pinaud Lilac Vegetal after-shave lotion is being offered in a "double header" package, to introduce a new talc with a matching scent. Selling for $1.00 for a limited time, the two items priced singly amount to $1.60. Lilac Vegetal, recipient of a 50-year award by the Brand Names Research Foundation for continuous public use, has been a Pinaud leader since it was put on the market in 1889. Eau de Quinine, 1858, also received the Foundation's certificate of public service awarded to brand names.

Mass Helps Class

A successful class product, selling to a selected distribution (a little over 1,000 drug stores and department stores) is profiting in a sort of by-product way from a heavily advertised mass distribution product owned by the same company. Inquiries from many drug stores which follow an occasional mention of the class product on the radio program of the mass line, are answered in a courteous letter explaining the reasons for restricted distribution. A copy of this letter is mailed to the nearest retailer carrying the class line and usually results in a pleased reply.

Drug Store Study

Everyone knows that there are good and bad drug stores. Few manufacturers, even the largest and most successful, have adequate information as to which stores are good and which bad for them and how good or how bad. But one manufacturer selling over 20,000 stores and eminently successful in this field, has decided to get this information. A staff of specially trained investigators has just finished covering every drug store in several wholesale areas on the west coast as defined in a recent NWDA survey and are now working an eastern state. A four-page questionnaire is filled out for each store. Information includes store layout and position of departments, appraisal of departments, cleanliness, number and kind of sales help, a check list of mass and class brands carried. Over 4,000 stores on the coast out of a total of over 9,000 carried this company's goods. Following the investigation the number of stores sold was cut to 1,800, dropping approximately 2,200 stores. There were four basic reasons for dropping these stores: (1) liquor department dominant, (2) fountain and restaurant dominant, (3) primarily an ethical prescription pharmacy, (4) dirty, ill-kept store. Just to make this drastic cut which will be made on a national scale as the company covers the ground, more interesting, this large company has active plans for the greatest expansion in its history.

The Gal on the Tractor

The gal on the tractor may not be the glamor girl farm magazine advertisements show but she still uses her cosmetics. Writing to the "Farm Journal" a girl subscriber who is running a tractor in Minnesota criticizes the fashion ensemble in tractor ads and then proceeds to say "I apply gobs of cold cream to face and hands."

Post-war Polish

La Cross has created quite a wave of excitement with a new formula nail polish which is described as having all of the good points of nail polish plus a new flexibility which increases its wearing qualities. "Fits like a second skin over your nails giving a smooth natural looking finish instead of a rigid shell-like covering," is the way a Boston beauty editor described it. The container looks pretty much like one of the modern ink bottles, and the brush instead of going up and down goes in at the side. The bottle will not tip or spill and the brush rests at its working angle. A short stemmed, long handled brush is used, which gives more control in applying the polish since it can rest against the index finger. The new product is called Nail-On, and so far has been experimented with in Boston and in Buffalo.

Laboratory coating machine used by technicians for testing covering qualities of Paisley Adhesives

BUY COVERAGE NOT POUNDAGE

WHEN YOU BUY ADHESIVES

Coverage means economy! That's why PAISLEY Labeling, Laminating, Sealing Adhesives and Coatings are carefully designed with this important factor in mind. Scientific blending and compounding produces glues, pastes and resin emulsion cements that are COHESIVE . . continuous films that cover more surface when spread in accurate amounts of micrometric thinness. Thin continuous films set faster . . speed up production . . give greater coverage . . save you money because they lower unit costs. Don't be content with bonding or sticking qualities alone . . benefit from COVERAGE also.

Measurement of exact wet or dry film thickness is regular development and control procedure in Paisley Laboratories.

Specify PAISLEY on your next requisition and check these qualities in your regular production. There is a PAISLEY Adhesive for every gluing, laminating, sealing and coating operation. Our laboratory and trained service men will help you obtain the full benefits of modern adhesive research.

SEND FOR a *PAISLEY Adhesive Operation Data Sheet.* It will point the way towards getting the one best adhesive for a specific operation. This skilled laboratory service is yours without cost or obligation. Write today!

AMERICAN MANAGEMENT ASSOCIATION

PACKAGING EXPOSITION

1946
APRIL 2-5
PUBLIC AUDITORIUM
ATLANTIC CITY

VISIT OUR EXHIBIT IN BOOTH No. 116-117

PAISLEY PRODUCTS INCORPORATED

Manufacturers of Glues, Pastes, Resin Adhesives, Cements, and Related Chemical Products

1770 CANALPORT AVE., CHICAGO 16, ILL. ★ 630 W. 51st STREET, NEW YORK 19, N. Y.

Windsor House, Ltd. will introduce Calexico cologne, an intriguing fragrance, which comes in a colorful bottle topped with a replica of a Mexican sombrero.

Colorful Cologne

Calexico is the name of a colorful cologne number that Windsor House will introduce. Calexico cologne comes in a bottle the bottom of which is decorated with bands of color and the stopper is a replica of a Mexican sombrero. The cologne will be promoted along with the Calexico Colorama, a collection of spring and summer fashions styled by California's fashion designers. The fragrance is as lush as the package is colorful.

Lancome offers its three perfumes, Cuir, Tropiques and Fleches, to the American market, attractively bottled and packaged, each with its own symbol.

Lancome in America

Lancome now offers three of its perfumes to the American market. One is called Cuir, a dry perfume, intense and vibrating, another is Fleches, a fragrance reminiscent of a warm greenhouse, and the third, Tropiques, is a lush odor of tropical fruit and spices. Each fragrance has its own symbol, an orchid for Tropiques, arrows for Fleches and a rose for Cuir. Lancome has done a fine job of packaging the perfumes in flacons composed of five volutes, the last of which forms the body of the stopper. The coffrets holding the bottles are decorated with humming birds in various colors.

Bourjois has several attractive combinations for Easter promotion, among them this basket filled with Mais Qui face powder, talc, perfume and Eau Parfumee.

Prince Matchabelli has created a new setting for the gold-encrusted crown bottle which is now set in a cube of crystal-clear lucite.

Package-of-the-Future

The first impression of Prince Matchabelli's new Easter package is that of the familiar Matchabelli golden crown bottle frozen inside of a small block of ice. Actually, it is two squares of crystal lucite molded to fit the crown bottle and not the solid block it appears to be. When the gold cord around the package is untied, the two sides separate to present a golden crown holding one of three flower fragrances, Russian Easter Lilly, Georgian Carnation, or Royal Gardenia. A small nosegay of plastic flowers is embedded in one corner of the lucite. In natural color and appearing three-dimensional, the flowers, like the bottle, can be seen from every side of the package. This interesting new setting for the Matchabelli crown bottle is in time for Easter promotion. This is a little different treatment of the transparent packaging such as that used by Lucien Lelong for its Taglio, and by Dorothy Gray for its Magic Hour, but the trend toward it marches on!

Peggy Sage has introduced Flying Colors, two new polish shades in Shimmer-Sheen, the iridescent type of polish, cleverly packaged in a blue set box.

Helena Rubinstein has a special introductory package for Heavenly Glow, a new make-up. This is a smart round container of sparkling acetate.

Famous Plastics

FOR FAMOUS MERCHANDISE.

CAMPUS COSMETICS are made by Colonial Dames, Incorporated. Attractive containers of beautiful Plaskon Molded Color are used to express the character and quality of this famous merchandise. ☆ Plaskon can express the personality of your product, too. Study the advantages listed below. No other packaging material can provide the utility, the beauty and sales appeal that Plaskon offers your drug products.

- Plaskon is impervious to the effects of alcohol, acetone or other common organic solvents.
- Plaskon is odorless, tasteless, inert.
- Plaskon is not affected by oils and fats.
- Plaskon is available in a wide range of permanent colors.
- Plaskon can be molded into distinctive designs and shapes.

Your molder, or experienced Plaskon men, will be glad to show how these advantages can be put to work for you.

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MOLDED COLOR

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Canadian Agent: Canadian Industries, Ltd., Montreal, P. Q.

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WILLIAM E. SWINDELL started making glass in Baltimore back in 1847—and ever since successive generations have carried on in this business.

That bit of history is important to *you*—because glass making is an art as well as a business, and the accumulation of past experience and experiments, knowledge and know-how is at your service when you bring your bottle problems to Swindell. As a matter of fact, many a Swindell worker can boast a father and grandfather who, in their day, were on the Swindell payroll and passed their secrets of peculiar skills from father to son.

Whether you need hand made or machine made bottles, private mould or stock models, you can profit by Swindell's outstanding reputation as fine bottle makers.

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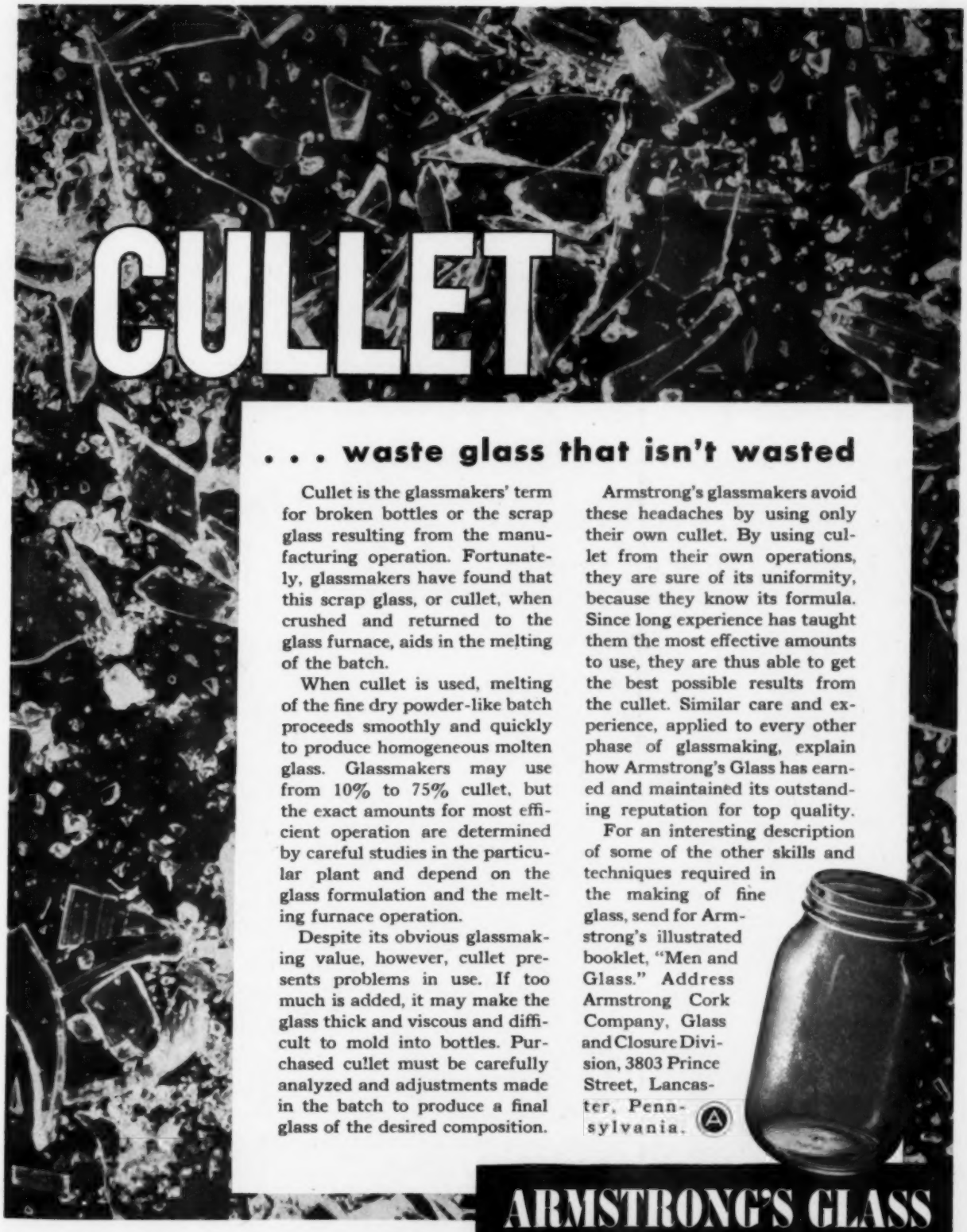
CONTINENTAL is a big family offering a wide variety of paper packages—liquid-tight paper containers and cups, fibre cans and drums . . . packages that safely carry your product everywhere (yes, and into every room in the house). The famous Continental Triple C trade mark stands for one company with one policy—to give you only the best in quality and service.

Tune in: "CONTINENTAL CELEBRITY CLUB" *every week over coast-to-coast CBS Network*



. . . waste glass that isn't wasted

Cullet is the glassmakers' term for broken bottles or the scrap glass resulting from the manufacturing operation. Fortunately, glassmakers have found that this scrap glass, or cullet, when crushed and returned to the glass furnace, aids in the melting of the batch.

When cullet is used, melting of the fine dry powder-like batch proceeds smoothly and quickly to produce homogeneous molten glass. Glassmakers may use from 10% to 75% cullet, but the exact amounts for most efficient operation are determined by careful studies in the particular plant and depend on the glass formulation and the melting furnace operation.

Despite its obvious glassmaking value, however, cullet presents problems in use. If too much is added, it may make the glass thick and viscous and difficult to mold into bottles. Purchased cullet must be carefully analyzed and adjustments made in the batch to produce a final glass of the desired composition.

Armstrong's glassmakers avoid these headaches by using only their own cullet. By using cullet from their own operations, they are sure of its uniformity, because they know its formula. Since long experience has taught them the most effective amounts to use, they are thus able to get the best possible results from the cullet. Similar care and experience, applied to every other phase of glassmaking, explain how Armstrong's Glass has earned and maintained its outstanding reputation for top quality.

For an interesting description of some of the other skills and techniques required in the making of fine glass, send for Armstrong's illustrated booklet, "Men and Glass." Address Armstrong Cork Company, Glass and Closure Division, 3803 Prince Street, Lancaster, Pennsylvania.

ARMSTRONG'S GLASS
and
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1. Non-rolling, extra depth, Bakelite cap, thick flange rubber part; Saftee ball glass.

Patented in U. S. A., Canada, Great Britain and other countries.

2.
Double shell metal cap; special thin flange rubber part; special bent glass.

4. (below)
Single shell metal cap; thin flange, non-swelling Amekine synthetic rubber part, without strong odor; blunt glass.

3.
Regular or acid resisting plastic cap; regular rubber part in various colors; semi-blunt glass.

New Perfection DROPPING PARTS

5.
Fancy colored beetle cap; midget rubber part; regular straight glass.

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NEW PERFECTION offer you the greatest freedom of choice as to sizes, colors and materials, to suit every need, every climate, every taste. Bulbs of both natural and synthetic rubber, to resist age, chemical attack, heat and moisture. Caps of metal and Bakelite, in a variety of colors. Distinctiveness of package obtained by use of rubber parts, caps and bottles in harmonizing or contrasting colors.

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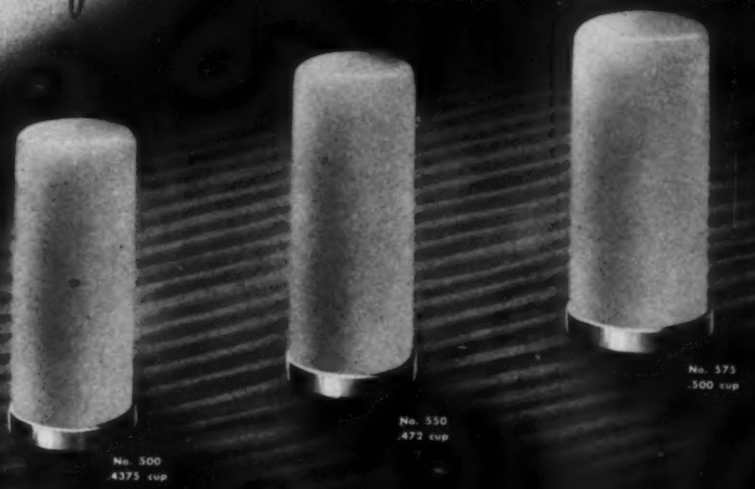

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That reminds me, Henry, I want to buy some more toiletries in those beautiful, breath-taking, new, modern Foster-Forbes Cosmetic Bottles.

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As the last step, the final precaution for clarity and purity, filter your product through a "Pyrex" Fritted Disc—*the glass that leaks.*

These discs are formed of glass particles of uniform size, made of Pyrex brand Chemical Glass, No. 774 and fritted into discs of five different porosities. The discs, in turn, are sealed into transparent glass vessels—fabricated from the same Chemical Glass.

The variety of shapes available—tubes, funnels, crucibles, etc.—make it easy to insert Pyrex Fritted Ware into your lines—usually just before filling your final container. The filters are economical—can be washed and sterilized repeatedly, used over and over again. Easily cleaned by water or chemicals. Cannot contaminate any solutions and are not destroyed or affected by materials commonly destructive to other filtering media.

Five porosities are available—ultra fine to extra coarse—covering practically the whole field of chemical filtration.

The wide variety of items in the Pyrex Fritted Glassware line are described in Part III of Corning's Catalog LP 24, or write us direct for detailed information.

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When he was only 22 years old, Antonio Stradivari produced the first of the famous violins that bear his name. His craftsmanship set a new standard of excellence that was attained in each of the 1100 instruments he made during his lifetime. The artistry which caused all of his creations to be of the same uniform and superior quality, stemmed from his attention to the minutest details of workmanship. The rich, full-bodied tone so characteristic of all Stradivari has been attributed not only to his design but to a secret varnish he used. Soft in texture, it produced a mellow finish shading from orange to red. Today, only about 600 of these violins are known to exist, and 300 of these are in America.

In the field of glass containers, Carr-Lowrey too has established a reputation for superiority. Strict adherence to exacting standards and constant attention to detail have made Carr-Lowrey an outstanding name among those who know and appreciate quality in commercial glass containers.

CARR-LOWREY GLASS CO.

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Easy to Look at ...and to Open

THE Anchor NKCT Cap is as good looking as it is easy to open. Its smooth lines compare favorably with the more expensive types of closures and add streamlined beauty to the glass package.

It provides a positive, airtight, leakproof seal because the cap thread contacts only the underside of the glass thread, exerting an even, downward sealing pressure on the liner around the complete circumference of the container finish. Its unique thread construction gives the Anchor NKCT Cap a spin-on action which makes for fast, low-cost application. The deeper, more broadly rounded thread gives the cap greater limits of tolerance and eliminates friction. The absence of interference, wedging or jamming of cap thread plus greater flexibility make it the easiest cap of its type to remove and reseal. This feature of the Anchor NKCT Cap permits easy accessibility to the contents—a genuine plus feature for your product in the eyes of any consumer.

Anchor
CONTAINERS and CAPS

PRODUCTS OF
ANCHOR HOCKING GLASS CORPORATION
LANCASTER, OHIO

THE ANCHOR NKCT CAP

A cork "tip" from an actress

This aspiring actress is making doubly sure her all-important "first impression" will be a favorable one. You can do the same for your products—help them get off on the right foot with your customers—by selecting only top-quality corks.

For the cork is the part of your package that your customer meets first. If it is hard to withdraw, breaks, or crumbles in the bottle, the customer's first impression of your product is unfavorable. Even if the inferior cork has sealed the contents safely, the unfavorable first impression of poor quality affects the customer's judgment of your product.

That's why it will pay you to order your corks from Armstrong. Here you're sure of getting only top-quality corks—corks that draw easily and in one piece—corks that create a favorable "first impression" as well as seal your package securely.

For information about any of Armstrong's Corks—straight, tapered, shell, flange, or Embossed-top—or other types of Armstrong closures and for helpful, impartial advice, get in touch with your nearest Armstrong representative. Or write to the Armstrong Cork Company, Glass and Closure Div., 3803 Prince Street, Lancaster, Pa.

For favorable "first impressions"

ARMSTRONG'S CORKS and CAPS

Glass
THE PERFECT SALESMAN

HE never asks for overtime pay and stays on the job constantly. He never strikes nor complains. He's inherently honest. He has an open, friendly face and inspires instantaneous confidence.

This perfect salesman is the sparkling Anchorglass Container. It is impervious to the chemical action of most drugs and chemicals, prevents evaporation or the absorption of moisture, and preserves all of the original strength, curative or other qualities peculiar to the product. Then, too, it is easy to open and can be resealed over and over again until the contents are entirely used.

In short, the Anchorglass Container is the perfect salesman.

Anchor
CONTAINERS and CAPS

PRODUCTS OF
ANCHOR HOCKING GLASS
CORPORATION
LANCASTER, OHIO

BRIDGEPORT
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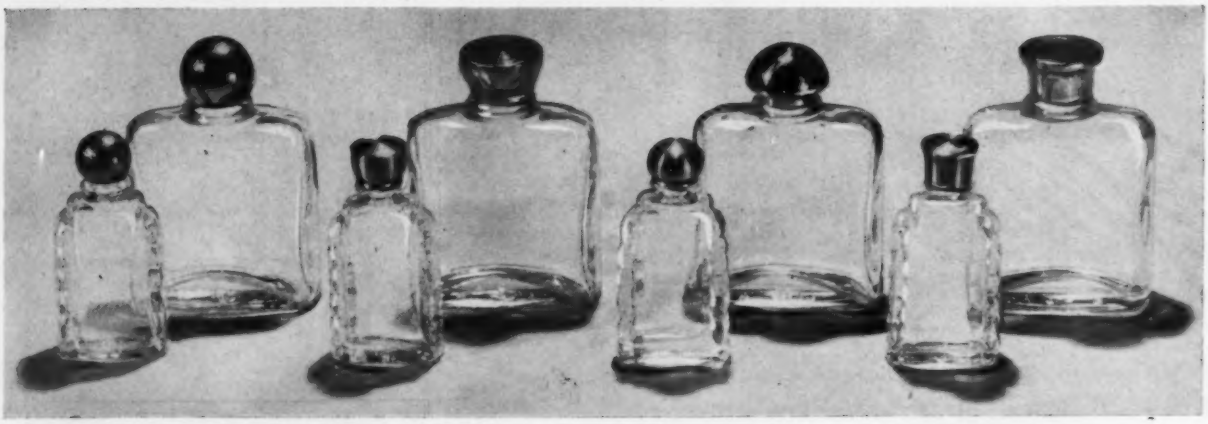

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New designs in our distinctive solid brass caps

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Industry's Books

Surface Active Agents, by C. B. F. Young, Ph. D., Director of Research, Clark Babbitt Industries, Inc., and K. W. Coons, Ph. D., Head of Department of Chemical Engineering, University of Alabama, 381 pp., Chemical Publishing Co., Brooklyn, $6.00.

The theoretical aspects of surface tension, its application to industrial fields, effects of surface active agents, and the relation between surface tension and other physical properties of matter are treated in detail. The rest of this book deals with diverse branches of industries in which surface active agents are used, and contains many typical formulae which will facilitate the formulation of emulsions and other products based on the utilization of surface active agents. Methods for the determination of surface tension are described and apparatus used are illustrated. A comprehensive alphabetical list of wetting and other surface active agents, giving also the chemical composition, the industrial use, as well as name and address of the manufacturers, will prove of great value to chemists and other workers of many industries. Chapter IV on Emulsions, and Chapter VI on Cosmetics will particularly appeal to this industry.

Labor Policy of the Federal Government, by Harold W. Metz, 284 pp., The Brookings Institution, Washington, $2.50.

This book is an analysis of the labor policy of the federal government. It attempts to describe the government labor policy in broad outline. On a systematic basis it analyzes the policy of the government irrespective of the specific statutes or agencies concerned. It seeks to discover the attitude of the government toward the formation of unions, strikes, picketing, collective bargaining, union organization, the labor market, wages, hours, and the peaceful settlement of disputes. The purpose of the analysis is to discover major trends of policy, and to determine where there are consistencies and inconsistencies in the attainment of major objectives.

Retail Merchandiser's Handbook, by John Bradford, 73 pp., Bruce Humphries, Inc., Boston, $2.00.

The author points out here that any merchandise will sell if properly displayed. He proceeds to give merchandising trade-tricks in display methods which can be utilized from season to season, and which will streamline retail selling for the merchandiser. This is a practical handbook for hints in arrangement of exterior and interior displays. It contains interesting suggestions relative to space, customer psychology, and the use of lighting and window signs.

Physical Chemistry Of Cells And Tissues, by Rudolf Hober, University of Pennsylvania School of Medicine, and Collaborators, 676 pp., Illus., The Blakiston Co., Phila., $9.00.

This is a book of original research recording the results of extensive studies in various fields of physical chemistry in their application to general and medical physiology. Physiology as a branch of physiochemical science dealing with life as a physical system, is the theme, and this exceedingly complex system is shown to be responsive to scientific analysis like any other natural subject. As the various elementary processes of cell life are segregated and analyzed with the new tools of modern physics, many important new facts and unsolved problems are brought to light. Emphasis is given to new developments in the field of submicroscopic structures, as evidenced by the complex organic macromolecules, the fibres, interfacial films and membranes. The significance of the structural aspect especially in the analysis of contraction, excitation, absorption, secretion and and other processes is pointed out, and alterations of the ultrastructures with metabolic changes are correlated.

Thus is offered a new approach to the problem as how, in cell life, chemical energy is transformed into mechanical or osmotic work.

Physiology and Anatomy, by Ester M. Greisheimer, M. D., Professor of Physiology, Temple University School of Medicine, Fifth Ed., 841 pp., Illus., J. B. Lippincott Co., Phila., $3.50.

Dr. Greisheimer for many years a teacher of students in physiology and anatomy has again revised this text in appreciation of the many difficulties often encountered by students who are introduced to the course for the first time. This book represents an attempt to present the essentials of anatomy and present-day physiology logically, simply and graphically. It is abundantly supplied with illustrations which should prove an aid, as they have been carefully selected with this in mind. The principal changes in the present edition are the revision of the anatomy of the nervous system, the revision of the chapter on temperature regulation, and the addition of a new chapter on the physiology of aviation.

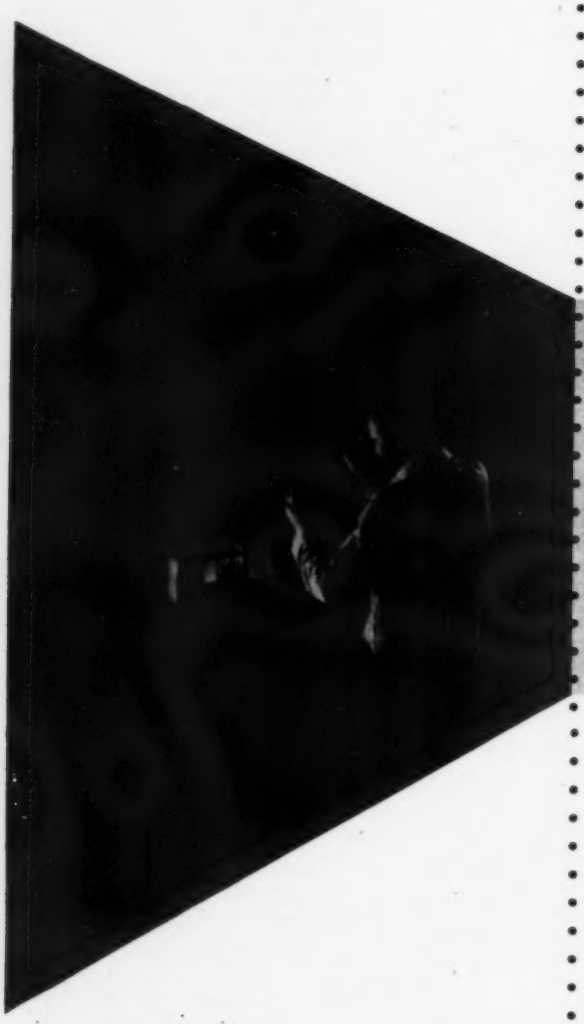
Cost Accounting and Inventory Control, by Paul Klemtner, President, Paul Klemtner & Co., Inc., Newark, 69 pp., Second Ed., Strawberry-Hill Pres, New York, $10.00.

This volume presents a cost accounting and inventory control system espressly devised for manufacturers of pharmaceuticals, biologicals, nutritionals, processed foods and cosmetics, who sell to medical and allied markets. A feature of this book is its comprehensive presentation of a system for allocating distribution costs to individual products. This allocation is based on firsthand knowledge of ethical marketing. Seventeen years ago Mr. Klemtner originated a cost accounting system for pharmaceutical manufacturers. Ten years ago he prepared a cost accounting manual for the American Pharmaceutical Manufacturers' Association. In his newest book he presents further details on the Unit Method of prorating manufacturing overhead, plus a completely new section dealing with inventory control.

Fundamentals Of Psychiatry, by Edward A. Strecker, M.D., Sc.D., F.A.C.P., Professor of Psychiatry and Chairman of the Department, Undergraduate School of Medicine, University of Pennsylvania, Third Ed., Illus., 222 pp., J. B. Lippincott Co., Phila., $3.

This book examines the physical causes of mental states and, in turn, their repercussions on the body. It sets the emotions in proper perspective as the greatest driving force in the life of the individual and in society. It explores the causes of all the common psychoses and explains methods of treatment for them, including alcoholism, hysteria, melancholia, paranoia, and schizophrenia. Finally, there is a timely chapter of psychiatry and the war and the special problems created both in the military establishments and in civilian life.

monsanto pharmaceuticals



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NEWS . . .

Faberge Buys Jersey Plant

The Faberge Company, has agreed to pay $300,000 for the Ridgefield Manufacturing Company plant, Ridgefield, N. J. The plant covers 36,500 square feet and will be put to full use within a month. A total of 150 persons, mostly semi-skilled, will be employed. The Faberge manufacturing plant at 240 Madison Ave. New York, will be discontinued, but the sales showroom there will be maintained.

Faberge has been manufacturing perfumes for the past nine years, specializing in Aphrodisia, Tigress and Wood-Hue. Prior to that Samuel Rubin, president of the firm, dealt in imported Spanish and French foods and perfumes.

Twentieth DCAT Dinner

A capacity crowd of 2,200 men attended the Twentieth Annual Dinner

HAROLD M. ALTSHUL

of the Drug, Chemical, and Allied Trades Section of the New York Board of Trade held at the Waldorf-Astoria Hotel, New York, March 14. At this first peace-time "Drug Trade Dinner" after a lapse of one year due to wartime conditions, Major General Leslie R. Groves, head of the atomic bomb project, delivered the main address. Harold M. Altshul, chairman of the Section, acted as toastmaster of the gathering, and after a tribute was paid to men in the member houses of the Section who served in the Armed Forces in the recent war, Mr. Altshul introduced Major General Groves.

Henderson Joins Stearns

Ralph Henderson, formerly vice president in charge of plant operations William R. Warner Co. Inc., has joined the executive staff of the Frederick Stearns & Company Division, Sterling Drug Inc., in Detroit.

From 1933 to 1939 Mr. Henderson was factory manager of Frederick

R. HENDERSON

Stearns & Co. of Canada Ltd., and from 1940 to 1944 was vice president in charge of plant operations for Stearns in Detroit.

Continental Can Gets Plant Back

The Continental Can Company plant at Humboldt Avenue and Broadway, St. Louis, Mo., has been returned to its owners by the army after nearly four years' use as an ordnance warehouse. Production will start as soon as the building can be renovated and equipment installed—which is expected to take until about the middle of the year.

J. T. Baker Building New Unit

The J. T. Baker Chemical Co. is putting up another manufacturing unit —this time for organic chemicals.

The building is just one of several which will be used for a variety of different processes, outgrowth of pilot plant operations other than DDT and 2,4-D recently released on a commercial scale.

Yaeger Joins Bjorksten Labs.

Luther L. Yaeger, formerly associated with the Youngstown Sheet and Tube Co., has joined the staff of the Bjorksten Laboratories as a research chemical engineer, in the plastics department.

Munhall to Sell for Sonneborn

Charles R. Munhall has joined the White Oil and Petrolatum Division of L. Sonneborn Sons, Inc., New York.

A graduate of Catholic University, Washington, D. C., and formerly manager of the Diamond Alkali Co., Mr. Munhall will represent Sonneborn's White Oil and Petrolatum division in western Pennsylvania and the panhandle of West Virginia with headquarters in Pittsburgh.

Dr. Winnek Joins Commercial Solvents

Dr. Philip S. Winnek, formerly director of research at Pitman-Moore Co., Indianapolis, has recently joined the research department of Commerical Solvents Corp., at Terre Haute.

Dr. Winnek's wide experience in pharmaceuticals includes work in the synthesis of amino acids and sulfa

DR. P. S. WINNEK

drugs. He holds a number of U. S. patents on chemotherapeutics, including sulfaguanidine. He has been the author and co-author of scientific papers on the synthesis and physical chemistry of amino acids as well as publications on nutrition, malaria, and other subjects.

Carnes Opens Chicago Office

A. H. Carnes has opened an office at 75 East Wacker Drive, Chicago, where he will act as manufacturer's representative for the Velsicol Corporation.

YOU'RE THE BOSS

QUALITY
INTEGRITY
SERVICE

We manufacture private brand cosmetics exclusively, but whether your requirements are

LIPSTICKS . . . CREAMS . . . LOTIONS . . .

POWDERS . . . PERFUMES . . . COLOGNES . . .

our results must meet *your* standards . . . must fulfill the promises made by *your* advertising and promotion programs . . . or we are a factory without a boss.

YOU'RE THE BOSS . . . but our standards must equal *yours*. Your order—large or small—receives the same painstaking attention. Ingredients used are of the highest quality and all products are prepared in strict compliance with Pure Food, Drug, and Cosmetic regulations.

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Scheller Joins Nutrition Research

Nutrition Research Laboratories announced the appointment of James C. Scheller as advertising manager. Mr. Scheller recently returned from the European Theater, serving three years as captain in the Medical Administrative Corps.

Abbott Establishes Fellowships

Abbott Laboratories has appropriated $50,000 to finance research fellowships in ten different universities, Dr. E. H. Volwiler, vice-president in charge of research and development, announced.

Under the terms of each grant, $5,000 is given to support research in the field of medicinal products during a five year period. The universities are to have sole rights to publish, patent, license or otherwise dispose of the results of the research conducted. The grants do not restrict the universities regarding the type or scope of the problem selected within the specified field of research.

The universities and the fellowships to be established in them are: Cornell University, biochemistry; Harvard University, organic chemistry; Jefferson Medical School, rheumatoid diseases; Johns Hopkins University, parasitology; University of Michigan, organic chemistry; University of Pennsylvania, bacteriology; University of Rochester, physiology; Vanderbilt University, bacteriology; University of Washington, pharmacology; and Washington University, pharmacology and biochemistry.

Glenn Holder Heads Ritchie & Janvier

Glenn Holder has been elected president of Ritchie & Janvier Inc., Bloomfield, N. J. Mr. Holder is joining the board of directors of Scott & Bowne, J. C. Enco Inc., The County Perfumery Co. Inc., and affiliated Beecham interests. He will be responsible for sales and advertising activities of these companies under the direction of their president C. J. Weedon.

Pearson Joins Dana Perfumes

Paul Pearson, well known in the toilet goods industry, has joined Dana Perfumes, Chicago, as assistant to Waldo V. Lossow, director of sales.

PAUL PEARSON

For eleven years Mr. Pearson was associated with Filene's in Boston as an executive in the toiletries department. He was recently discharged after two and a half years in the army.

Pictured above are four new men who have been added to the staff of Magnus, Mabee & Reynard, Inc. Left to right, Roy E. Webb, chemist formerly a 2nd Lt. with the Army Air Forces; Charles B. Taxier and Stanley T. Olds, sales representatives for the metropolitan area, ex-Sergeant and First Lt. respectively; F. Kenneth Stephenson, Jr., Asst. Manager, order dept., formerly with the AAF Personnel Distribution Command.

Major Sheffield Decorated

Major Thomas C. Sheffield, is shown being congratulated by General of the

MAJ. SHEFFIELD

Army H. H. Arnold, commanding general, Army Air Forces, who presented him with the Legion of Merit recently. Major Sheffield will shortly return to Civilian life, and rejoin the new England Collapsible Tube Co.

J. T. Baker Moves Offices

As part of the expansion program of the J. T. Baker Chemical Co., the sales, quotation, export and statistical research departments have moved from the main plant to newly remodeled and more spacious quarters on Main street, Phillipsburg, N. J.

Uehling Joins Dr. Hess and Clark

Dr. Hess and Clark, Inc., Ashland, O., announce the appointment of Theodore Uehling as director of a newly created department of Market Research.

Stearns and Winthrop to Market Fairchild Brothers & Foster Products

Manufacturer and distribution of all but three products of Fairchild Brothers & Foster, Division, Sterling Drug Inc., Detroit, has been taken over by Fredrick Stearns & Co. Division, Sterling Drug Inc., Detroit, it has been announced by Dr. J. Mark Hiebert Sterling vice president and general manager of the Stearns' division. The three, which will be manufactured and distributed by the Winthrop Chemical Co. are Marinol, pHisoderm and Enzymol.

About fifty other trade-marks on the list will be marketed by Stearns as "Successors to Fairchild Brothers & Foster."

Dr. Dennis Appointed by Winthrop

Appointment of Dr. Emery Westervelt Dennis as associate director of the biological division and head of the chemo-therapy laboratory of the research laboratories of Winthrop Chemical Co. Inc., was announced by Dr. Theodore G. Klumpp, president.

Major Purinton— Searle Superintendent

Major John A. Purinton Jr., has joined G. D. Searle & Co., Chicago,

J. A. PURINTON JR.

as general superintendent, and will have charge of all plant operations according to the firm's president John G. Searle.

Major Purinton entered military service in 1942 after having been associated with the pharmaceutical industry since 1933. He was commissioned captain by the Office of the Surgeon General and was assigned to the Army and Navy Munitions Board to handle certain critical pharmaceutical and biological products required to meet military programs.

A graduate of Brown University, he received his A.M. degree from the department of Chemistry and his Ph. D. degree from the department of Chemical Engineering of the Ohio State University.

Ross Rejoins Consolidated Products

Lt. B. W. Ross who was with the 69th Division when they made contact with the Russian Army in Germany has returned to his duties as sales engineer with Consolidated Products Co. Inc., of New York.

Corp. James J. Flannery for three years in the south Pacific and is now at Tilton Hospital in Ft. Dix, N. J. expects upon his release from the army to return to the sales staff of Consolidated Products Co. Inc., of New York.

Frank—Macy Drug Plant Manager

Robert G. Frank has been appointed manager of the drug factory at Macy's Long Island warehouse, it was announced by John E. O'Gara, vice president and general manager.

Mr. Frank joined Macy's in 1942 as general assistant in the drug factory, having previously had experience in the chemical business. He next became purchasing agent for the drug factory, and a year ago was made associate manager.

Rene Forster Incorporates

As of March 1st, Rene Foster Company will have been incorporated to Rene Forster Company Incorporated. The management and sales will continue under the direction of Rene Forster, Arnold F. Anderson, Frank H. Sloan, Robert G. Saenger and F. K. Schubert.

Mr. Saenger returns to the sales staff of the Company, after a period of four years service with the Army.

Dr. Moore Joins Stearns Research

Dr. J. Mark Hiebert, vice president and general manager of Frederick Stearns & Co. Division, Sterling Drug Inc., announces the appointment of Dr. Maurice L. Moore, director of

DR. MAURICE L. MOORE

organic research, as assistant to Dr. Melville Sahyun, vice president in charge of research.

Prior to joining the Stearns staff, he was organic research chemist at Sharp & Dohme Inc., Philadelphia.

Schumacher and Vance Form Civray, Inc.

E. W. Schumacher and Paul M. Vance, formerly sales representatives for Lynette Perfumes Inc., have formed Civray Inc., at 741 Fifth Avenue, and will put on the market in April a line of new cosmetics.

Andre Givaudan Visits Here

Andre Givaudan, of Geneva, Switzerland, visited the offices of Givaudan-Delawanna, Inc., last month and was present for the first peace-time sales meeting of the organization since 1938. Dr. Louis Helfer, Technical director of research of the Geneva organization accompanied him.

Mr. Givaudan said that conditions in Switzerland as regards the aromatic chemical situation are improving slowly. Shortages of coal, fats, and essential oils for raw materials, such as citronella,

ANDRE GIVAUDAN

lemongrass, and others, is hampering production. Also basic chemicals which were formerly imported from Germany are difficult to obtain. Shipping space for import and export is hard to get. France is importing as much aromatic chemicals from the United States as it can get. Import licenses for importation of aromatic chemicals into France are not easily obtained due to exchange difficulties. Prices in Switzerland and France change from day to day.

Swiss labor costs have risen sharply from an average of 35 cents per hour prewar for the aromatic chemical industry to a present level of 80 cents per hour. This sharp rise and the advances in the costs of all raw materials and other things will naturally cause prices for Swiss aromatic chemicals to be higher than prewar levels.

Dr. Eric Kunz, president of Givaudan-Delawanna, Inc., and Ralph Stevenson, sales manager of the company, expressed the opinion that the percentage of aromatic chemicals used in the postwar period will be greater than during prewar times. Large users of perfumes in soaps and similar products are afraid that with expanding business there will not be enough of the natural products available and therefore they are more inclined to increase the percentage of aromatic chemicals which they use.

Givaudan Celebrates 20 years

Givaudan-Delawanna, Inc., officially observed its twentieth anniversary in the United States with a dinner at the Hotel Lafayette, New York, February 18th. The dinner, attended by approximately sixty members of the staff, climaxed a national sales meeting which brought together sales personnel from the company's branch offices. The company was established in 1924, but the official celebration was postponed in 1944 because representatives of the parent house in Switzerland were unable to attend.

A feature of the dinner was opening of a vial of Musk Xylol, a synthetic product, produced by the company more than twenty-one years ago. The vial, despite its age, still contained the tenacious musk odor— "a symbol of the contribution of our company to the aromatic industry in the United States" according to Dr. Eric C. Kunz, president.

Present at the dinner were Andre Givaudan, son of one of the founders of the Switzerland organization; Dr. Louis Helfer, technical director of the Swiss firm; Dr. Kunz; Ralph M. Stevenson, Givaudan-Delawanna sales manager; Harold F. Duffy, controller and other Givaudan executives and representatives of the sales, production, research, patent and other departments.

The original Givaudan company was established in Geneva in 1895 by Leon Givaudan, who was joined a few years later by his brother, Xavier. It was one of the first chemical companies to be devoted exclusively to the manufacture of aromatic chemicals.

What's New 100th Issue

The hundredth consecutive issue of What's New, the house organ of Abbott Laboratories has come off the press. In the ten years of the publication, it has brought forth the latest developments in medical science with accuracy, brevity and force. Aside from this it is one of the best house organs in the country, employing well-known artists and writers to give color and variety not only for its covers but to enliven the articles, some of which were so vividly presented as to be a model of what a house publication can do when imaginativily and effectively executed.

Lewitus Joins Drug Products

Victor Lewitus, for the past four years a medical copywriter for Merck & Co., Inc., and previously medical copywriter for Hoffmann-La Roche and Roche-Organon, has just become vice-president in charge of medical services for the Drug Products Co., Inc., New York.

Professor Lewitus is a thoroughly experienced pharmacist and formerly was instructor in Materia Medica at Columbia University. He has written an excellent treatise on Vitamins and Hormones in Veterinary Medicine, and for some years was a regular contributor of feature articles on Toxicology, and Pharmacology to various well-known pharmaceutical, nursing, veterinary, and scientific publications.

Breon Advances Morrison

The George A. Breon Company has recently appointed Fred A. Morrison, advertising manager. Mr. Morrison was in the Breon sales department for eight years, during which time he occupied every sales position from detailist to general sales manager.

Alfred Ross Rider

Alfred Ross Rider, seventy, secretary and director of the Tilden Company, New Lebanon, N. Y., died recently at House of Mercy Hospital, Pittsfield, Mass.

Mr. Rider was born in Rose, N. Y., and had lived for fifty-five years in New Lebanon. He had been justice of the Peace for twenty-two years and was a director of the Harlem Valley State Hospital at Wingdale. Surviving is his wife, Mrs. Lois Wallace Rider.

Bell Chemist Retires

Dr. Robert R. Williams, chemical director of Bell Telephone Laboratories here for more than twenty years and pioneer research chemist who isolated and then synthesized the so-called "nerve vitamin" B_1, retired recently from his post as chemical consultant at the laboratories.

Dr. Williams, whose research on vitamin B_1 made possible important advances in medicine, received the American Chemical Society's Willard Gibbs Medal in 1938 for his findings, after twenty-five years of experiments in the field.

After serving as director of the Bell chemical laboratories from 1924, Dr. Williams was appointed chemical consultant last spring.

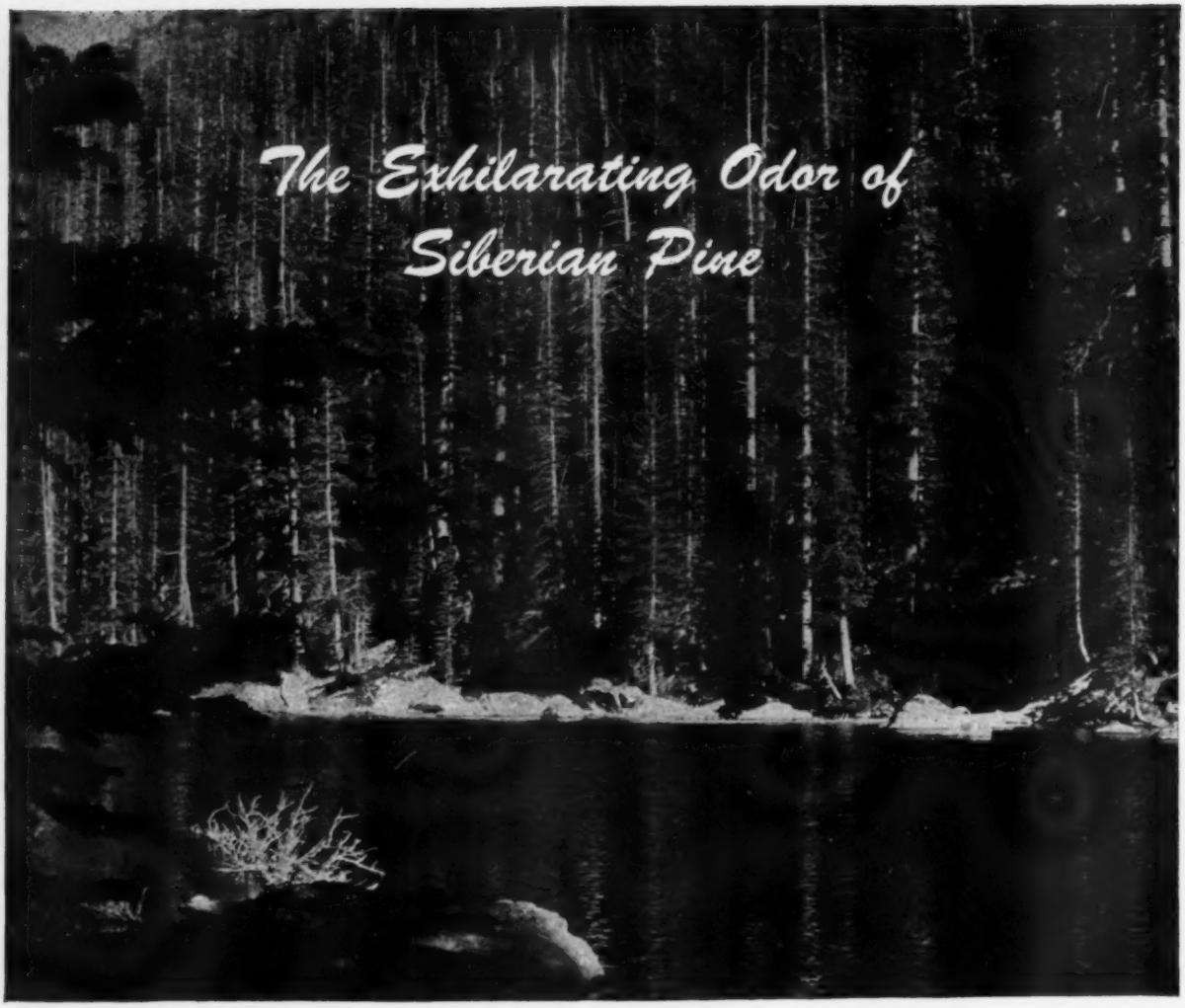
Gertrude Brows with Henry Rosenfeld

Henry Rosenfeld Cosmetics Corp., New York, has appointed Gertrude Brows as managing director. Miss Brows has been sales promotion and advertising manager of Jacqueline Cochran Cosmetics for the past five years, and previous to that she was merchandising editor of Department Store Buyer for three years.

Two Service Men Join American Oil

Two service men have been appointed to the sales staff of the American Oil and Disinfectant Corporation, New York. Lt. Curt L. Sonneborn, of the Army Air Force, and George Fowlkes, USN, will be sales representatives in Illinois and The Carolinas respectively.

A group of Lentheric officials, representatives and guests who celebrated the opening of the company's new showroom in Rio de Janeiro, Brazil. Fourth and fifth from the left are Kurt Loesch and W. D. Canaday, Lentheric vice presidents. To the right of Canaday is Dr. Paul Gusmao, general manager of Cristoph. The showroom in the Brazilian capitol is one of the first "events" in Lentheric's 1946 Latin America expansion program.



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San Francisco: Braun-Knecht-Heimann Co. • Los Angeles: Braun Corp. • Seattle, Portland, Spokane: Van Waters & Rogers, Inc. • Canada: Richardson Agencies, Ltd., Toronto

Wolfe and Fernald Appointed by Colgate

Roy W. Peet, vice-president of Colgate-Palmolive-Peet Company, Inc., has

HARRY D. WOLFE

appointed Dr. Harry Dean Wolfe as director of marketing research, with Robert O. Fernald as assistant to the director.

Vick Buys Sofskin Co.

With the acquisition of the Sofskin Co., a cosmetic offshoot of the Glessner Co., a proprietary medicine house of Finlay, O., Vick Chemical Co. makes one more step in expanding the Vick cosmetic empire. In the Vick fold now are the Seaforth men's line of Alfred McKelvy Company, Prince Matchabelli, and Minapoo.

Sofskin brings to Vick the first cosmetic that may (now) be properly classified in the cosmetic mass distribution field. Started shortly before the war, bobbing up in a small midwestern town, sponsored by a relatively little known proprietary medicine company, but having a happy combination of a good name, an excellent package, and a good formula, it clicked first in the beauty parlor field and then, in the first days after Pearl Harbor, it entered the highly competitive hand cosmetic market in the retail field.

Those were good days. Sofskin with bright colored packaging, an excellent gift appeal in this branch of the industry not particularly favored with gift choice, appearing at a time when thousands of not too brand-conscious consumers were struggling to buy, rode within a few years to scattered but national distribution and a volume which just about bumped the million dollar mark.

Two of Vick's previous purchases involved striking personalities in the industry—Alfred D. McKelvy, who in a few years with Seaforth as his medium made a high, wide and handsome mark in the industry, and Prince Matchabelli, who, although he died several years before the Vick purchase of his company, left a lasting reputation for charm and promotion skill. No personalities, in a cosmetic-trade sense, are involved with Sofskin. Vick has acquired a good position in the line of a highly competitive, but highly satisfactory branch of the industry.

Dr. A. N. Richards (left), Professor of Pharmacology and vice president in charge of Medical Affairs of the University of Pennsylvania, is shown receiving the Procter Medal for his services in the war-time development of Industrial Penicillin. Dr. Charles E. Vanderkleed of McNeill Laboratories, presented the medal on behalf of the Philadelphia Drug Exchange which established it. Frank F. Law, Wyeth Incorporated, toastmaster at the award dinner looks on.

Goby Returns to France

Francois Goby, president and general manager, Tombarel Freres, Grasse, France, left February 20 to return

FRANCOIS GOBY

to Paris after a three month stay in America, where he visited the American company, Tombarel Products Corp. Mr. Goby, who has been coming to this country on regular visits for the past twenty years, excepting the war years, expects to return for a further visit within a year.

Dr. Larkum—Ames Medical Director

The appointment of Newton W. Larkum, M.D., as Medical director of Ames Company, Inc., has been announced by Charles F. Miles, vice president. Dr. Larkum comes to the Ames Company Inc., from the Army Medical Corps in which he served as a Lt. Colonel.

Col. Wilson Joins McKinsey & Co.

A. J. P. Wilson, until recently Lt. Col. in the Chemical Warfare Service, has joined the New York office of McKinsey & Company, management consultants. Col. Wilson served in both the European and North African theaters, and in the New York Procurement District and office of the Chief, C. W. S. in Washington. Prior to entering the army five years ago he was a consultant with another firm.

Dr. Foss—Calco Technical Director

Dr. Noel E. Foss, recently released as a major in the Army, where he served as laboratory officer of the Army Medical Purchasing Office, has been named technical director of the pharmaceutical department of Calco Chemical Division, American Cyanamid Company.

Continental Can Buys Fiber Can

The Fibre Can Machinery Corporation, of Rutland, Vermont, has been acquired by the Continental Can Company, according to Hans A. Eggerss, Continental's executive vice president.

FREDERIC SCHWARZ

Bristol Labs Names Four Officers

Four executives of Bristol Laboratories Inc., received appointments as officers in the organization in a recent meeting of the board of directors.

Frederic N. Schwarz, formerly assistant to the president, was named executive vice president and director. Dr. Amel R. Menotti, director of research, was made a vice president, Dr. Philip I. Bowman, plant manager of the Penicillin division, was named assistant vice president. Hans C. Todt now holds the title of assistant comptroller.

DR. P. I. BOWMAN

Rasch Named Winthrop Secretary

Election of David Rasch as secretary of Winthrop Chemical Company, Inc., was announced by Dr. Theodore G. Klumpp. Since 1934 Mr. Rasch has been associated with Sterling Drug Inc., and its wholly owned subsidiary, Winthrop Chemical Company Inc., becoming head of the legal department in 1942.

Born in New York City in 1906, Mr. Rasch graduated from New York University with a B.S. degree in 1927, and received his LL. B in 1928.

Witco Acquires Frank Chemical

The Witco Chemical Company announces acquisition of the Franks Chemical Products Company, Brooklyn. No change will be made in the present management and Joseph M. Franks will continue as president. The company will be known as the Franks Chemical Products Co. Division of Witco Chemical Co.

DR. AMEL P. MENOTTI

Sanders Joins Commercial Solvents

The well-known entomologist, James G. Sanders, is now associated with Commercial Solvents at New York. He will engage in developing markets for insecticides, fumigants, and allied products.

During the war, Mr. Sanders was in charge of the food division of the Office of Coodinator of Inter-American Affairs in Brazil. From there, he went to Peru and Bolivia to increase the production of quinine. He was later sent to Iran to control the distribution of food.

Mr. Sanders' wide experience as an entomologist extends back almost half a century. In 1901 he became an instructor in entomology at Ohio State University. Following this he spent five years in the Department of Agriculture's Bureau of Entomology, Washington, D. C.

Carter Heads Ogilvie Research

Lawrence W. Carter, formerly of the National Lead Company Research Laboratories, has been appointed director of research and development for Ogilvie Sister Laboratories, Inc.

Allen and Brown—Bristol-Myers V. P.'s.

Joseph M. Allen and Robert B. Brown have been elected vice-presidents

JOSEPH M. ALLEN

of Bristol-Myers Company, New York, according to an announcement of the board of directors.

Mr. Allen, with the company for twenty-five years, has been assistant vice-president in charge of advertising. He is one of the pioneers in radio advertising, having been in charge of Bristol Myers programs since 1925,

ROBERT B. BROWN

when the Ipana Troubadors first went on the air.

Mr. Brown, joined Bristol-Myers in 1936 as advertising manager, becoming an assistant vice-president three years later. A graduate of Cornell, he received his early business training with an advertising agency.

Canadian Firm Wants Agencies

McIntyre & Wilde, 1846 Haro St., Vancouver, B. C., are interested in obtaining the exclusive agency for Canada of cosmetic items made in this country.

Group Insurance for MM&R

A complete program of group insurance protection for its employees has been put into effect by Magnus, Mabee & Reynard, Inc. The insurance, covering the corporation's employees at the main plant and office in New York and its branches, provides life insurance, accidental death and dismemberment insurance, sickness and accident benefits and hospital expense and surgical operation insurance. Benefits are based on earnings.

Magnus, Mabee & Reynard Inc., announced that it was paying the entire cost of this extensive program, which is underwritten by the Metropolitan Life Insurance Company.

Refresher Courses for Winthrop Men

Forty professional service men of the Winthrop Chemical Company, Inc., first to be graduated from a refresher course on new drugs at the company's laboratories at Rensselaer, N. Y., were honored at a dinner in the Crystal Room of the De Witt Clinton Hotel, Albany. Twenty-eight of the graduates were recently released from the armed forces. Starting in March a new group will be given the course, which covers wartime developments in pharmaceuticals. Eventually more than 300 Winthrop men from all parts of the country will attend the school, conducted by the medical and scientific staffs of the company, according to Lt. Col. J. C. Noh, recently appointed vice-president in charge of sales.

Plant officials who attended the dinner included Dr. A. E. Sherndal, vice-president and plant manager; Dr. Harold L. Hansen administrative assistant to the president; Dr. Maurice L. Tainter recearch director; Dr. C. M. Suter, director of chemical research; and Dr. Richard Carroll, superintendent of manufacturing.

Attending from New York were Dr. Theodore G. Klumpp, president; Lt. Col. Noh; Dr. M. Lasersohn, vice-president; Dr. F. J. Stockman, vice-president; Dr. J. B. Rice, vice-president in charge of medical research; L. C. Tiller, assistant to the president; Dr. T. B. Guild and Dr. E. Zander, associate medical directors; J. M. Grece manager, and A. W. Jensen assistant manager, professional service department; J. G. Jordan; and C. B. McDermott.

Tax Refunds to Drug Companies

Big drug companies held the top spots on a list of tax refunds filed with Congress by the Treasury department. These refunds were with reference to drawbacks on alcohol used for medicinal purposes.

The top refund, $2,252,254 for over payment of non-beverage alcohol taxes went to Eli Lilly & Co. Three other drug companies which received refunds in excess of $1,000,000 were, Parke, Davis & Co. $1,610,613; The Upjohn Company, $1,139,056, and Sharp & Dohme, $1,856,114.

Other large refunds for drug companies were: E. R. Squibb & Sons, $316,652; McCormick & Co., $361,000; Lydia E. Pinkham Medicine Co., $697,816; United Drug Co., $496,760; Henry K. Wampole & Co., $558,827; Wyeth Inc., $626,931.

Winthrop Employees Honored by O. S. R. D.

Ninety-four employees of Winthrop Chemical Company received from the Office of Scientific Research and Development certificates "in appreciation of effective service" which contributed "to the successful prosecution of the second World War." Presentation of the certificates was made by Dr. Theodore G. Klumpp, president, at a dinner dance of Winthrop research workers held in Albany, N. Y. The company's plant and laboratories are located in nearby Rensselaer, N. Y.

Miles Laboratories in New York

Miles Laboratories Inc., Elkhart, Ind., have opened a New York District Sales office at 52 Wall Street, Charles K. Noble, is the district manager.

Garst Joins Bjorksten Labs

Stephen D. Garst has joined the staff of Bjorksten Laboratories as a chemical metallurgist. Mr. Garst received his degrees of B.S. in Chemical Engineering and of M.S. in Metallurgy from the University of Iowa in 1931 and 1932. After graduation, he worked several years for the Federal Government and for the Socony Vacuum Oil Co., as a chemical engineer and metallurgist.

McKeen on Brooklyn Poly Board

John E. McKeen, vice president and director of Chas. Pfizer & Co., has been elected to the board of directors of the Polytechnic Institute of Brooklyn as alumni representative on the board. Mr. McKeen has been associated with Pfizer since his graduation from Brooklyn Polytechnic in 1926.

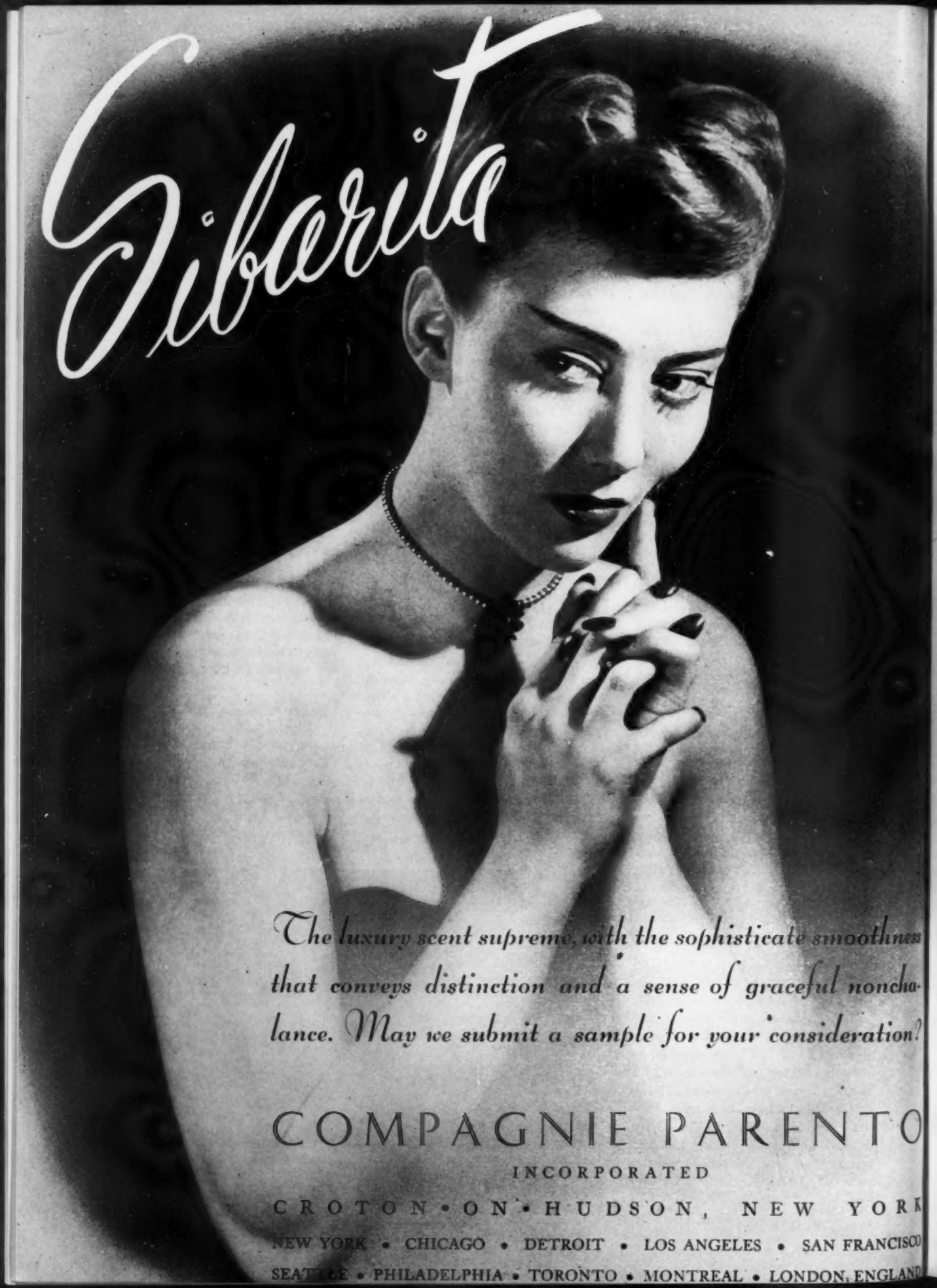
DeWitt Thompson Joins Heyden

DeWitt Thompson, has joined the sales department of the Heyden Chemical Corp., New York. Mr. Thompson, who served forty-six months in the Navy, where he reached the rank of Commander, will cover Maryland, Pennsylvania and western New York. Prior to his Navy service, Mr. Thompson was with Mathieson Alkali Works.

Hooker Advances Daving

The Hooker Electrochemical Company of Niagara Falls, N. Y. has recently assigned Charles Daving as salesman making his headquarters at Cincinnati, Ohio. Mr. Daving, a graduate of Capitol University, spent a number of years in plant work at Niagara Falls.

Pictured above at the meeting of the Luncheon Group of Chicago Drug & Chemical Assn., from left to right are Harry Dunning of Albert Verley & Co., president of the club; Dale Ruedig of Eli Lilly & Co., vice president; Dr. Smith, who addressed the group; and Edgar Brand, L. Sonneborn Sons luncheon chairman.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T.G.A. Convention Under Way

The Toilet Goods Association Convention Committee, under the chairmanship of L. R. Root, of Scoville Manufacturing Co., is now busy working out the details of the coming convention to be held at the Waldorf-Astoria Hotel, New York, May 15, 16, 17. The committee advises members im-

L. R. ROOT

mediately to contact the hotel that they have patronized throughout the year for room reservations. Because of the extreme shortage of hotel accommodations the Waldorf cannot set aside a large number of rooms for the convention.

Serving with Mr. Root on the Convention Committee are: Karl Voss, Karl Voss Corporation, treasurer of the committee; A. C. Burgund, Carr-Lowrey Glass Co.; Charles Fischbeck, the George Uhe Company; P. E. Haebler, Goldschmidt Corporation; W. E. Klass, Brass Goods Manufacturing Co.; M. Lemmermeyer, Aromatic Products, Inc.; M. F. Martin, U. S. Industrial Chemicals, Inc.; W. P. Murray, Continental Can Co.; and J. Blaine Walker, Hazel-Atlas Glass Company.

Drug Salesmen's CIO Union Elects

The Drug Trade Salesmen's Union, Local 65, CIO, New York, elected officers late last month. Michael Cowen, American Druggists Syndicate, was re-elected president; Max I. Kern, Norwich Pharmacal Co., was reelected vice-president; Barnie H. Mishkin, Purepac Corp., formerly secretary-treasurer, was elected secretary; and John Sirkus, Ormont Drug & Chemical Co., was elected treasurer.

Want American Catalogues

The American Legation at Tangier, Morocco, would like to have manufacturers of cosmetics, or their accredited export representatives, furnish it with price lists, discounts, terms and illustrated catalogues of United States cosmetic and toilet preparations. It has been suggested that these be forwarded by air mail.

New Directors

Benjamin H. Lee is one of four new directors elected to the board of the Alfred D. McKelvy Co. Mr. Lee is product development manager of the company which he joined in 1945. The other directors elected are, Benjamin M. Hines, sales promotion manager, who recently joined the company after three years service in the Navy as a lieutenant, prior to that he was assistant to the chairman of the board of the Vick Chemical Co.; Frank X. Patrey, comptroller and H. Robert Marshalk, sales manager of the company. In addition to serving as directors, these men and Hugh D. McKay, president, will serve on the planning board.

Courtley Expands

Announcement has been made of a new Courtley, Ltd., factory which is being built at Ellenville, New York. William Nassour, head of Courtley, Ltd., has announced that in addition to manufacturing facilities in Los Angeles, Mexico City and New York, expansion plans in 1946 include the opening of a Canadian plant and a factory in England.

Ungerer Appoints Dohrman in Phila.

Ungerer & Co., Inc., have announced the appointment of Edward C. Dohrman of Philadelphia as their sales representative in that area, with offices located in the Bourse building, Philadelphia.

Warren E. Kell, who preceded Mr. Dohrman as the Philadelphia representative has been transferred to the Boston office.

Lanvin Agency

E. L. Cournand of the E. L. Cournand Co., sole U. S. agent distributor of Lanvin Perfumes, has announced the appointment of A. Lieberfield as vice-president and general manager. Mr. Lieberfield was formerly manager of the Caron Corp.

Mr. Cournand has also announced that J. Henry Healy, formerly with Corday, will be associated with the firm in the promotion and merchandising of Lanvin perfumes.

Emil H. Schellack

Emil H. Schellack, vice-president and director of sales of the Upjohn Company, died February 12, at the age of 61 years. For over 26 years he had been connected with the Upjohn sales organization, joining the company as a salesman in 1919. He was advanced on many occasions becoming assistant

E. H. SCHELLACK

director of sales in 1941, general sales manager in 1942, and vice-president and director of sales in 1943. He represented the Upjohn Company in several national organizations, chief of which were the American Drug Manufacturers Association and the National Wholesale Druggists Association.

Dr. Bullard—Norwich Consultant

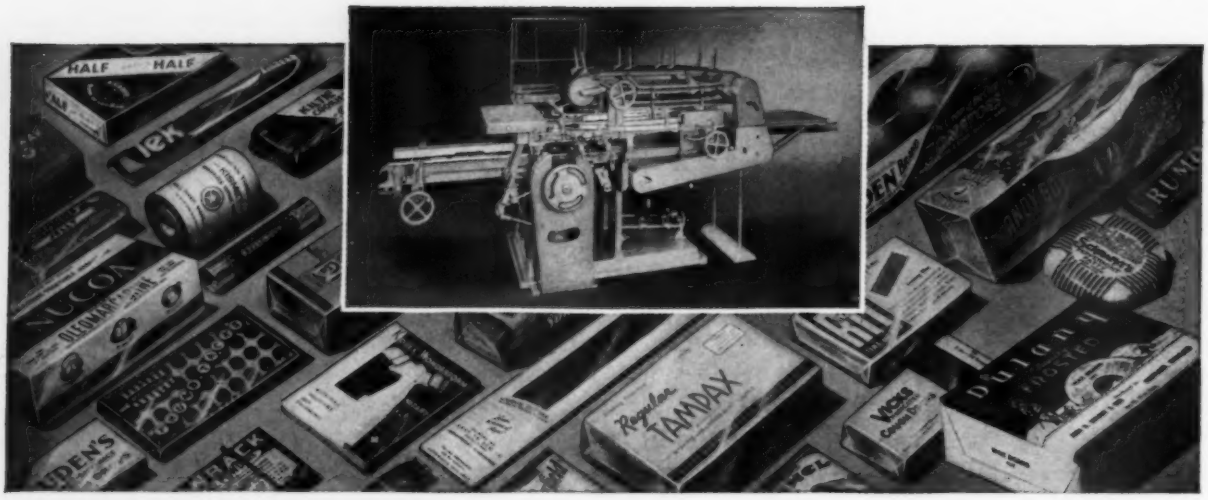
Dr. Ralph H. Bullard, Professor of Chemistry and director of the division of natural sciences at Hobart College, Geneva, N. Y., has been engaged as a consultant to the Norwich Pharmacal Company, Norwich, N. Y.

Dr. Bullard served from September 1942 to February, 1946, as technical aide to the director of chemistry and as assistant technical aide to the director of engineering research in the U. S. Navy. He was discharged as a Commander USNR. He is also a veteran of World War I, serving as an enlisted man in the Navy Boiler and Turbine Laboratory, Philadelphia Navy Yard.

Since 1919, Dr. Bullard has been on the faculty of Hobart College, in his present position, taking leave during his period of military service.

Milky-Way Cosmetics Move

Mary Hall's Milky-Way Cosmetics are moving offices and laboratory back to their former home, Chicago, February 15th. The address is 6 South Seeley Ave, phone Seeley 1682.



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You'll want to know, we are sure, what you can expect in the way of faster wrapping machines...What has been done to give our machines greater adjustability...How these machines can be adapted to your particular needs...What is taking place in the development of new types of wrapping materials.

You'll also want to learn of the latest applications of machine wrapping to new merchandising ideas. For example, fruit, vegetables, textiles and a host of other products never packaged before are now going to market in new and attractive machine-made wraps.

So make a note now to put the Exposition on your list of April "musts".

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Production Forum

By Francis Chilson
Industrial Consultant

Settling Strikes

After the discussion on this subject which appeared here last month, I happened to read a copy of "Time" magazine and discovered therein a note about the way Japanese laborers conduct strikes. According to "Time", a favorite form of strike is to occupy the plant and continue the work, making management lose face by increasing production tremendously. "Time" says that strikers at a Mitsui owned coal mine barred all management personnel from the pits and stepped daily production up from 250 to 620 tons. Also, the workers at Ashio copper mines operated during a strike, increasing production and doubling their own wages on a per ton basis.

The Japs have the answer! Make a bum out of Mr. Big by showing him that you can turn out twice as much production without supervision than you can when you are working under the watchful eye of the boss!

This formula is recommended to the CIO and also to the A. F. of L.

Reducing Your Line

Recently the research director of a large pharmaceutical organization told me that laboratory animals which they were breeding were multiplying at such a rate that their disposal was getting to be something of a problem. Since this particular outfit is noted for carrying everything in its catalog but the kitchen sink, I suggested to the scientist that his firm produce a line of canned chop suey as a means of disposing of the extra laboratory rats.

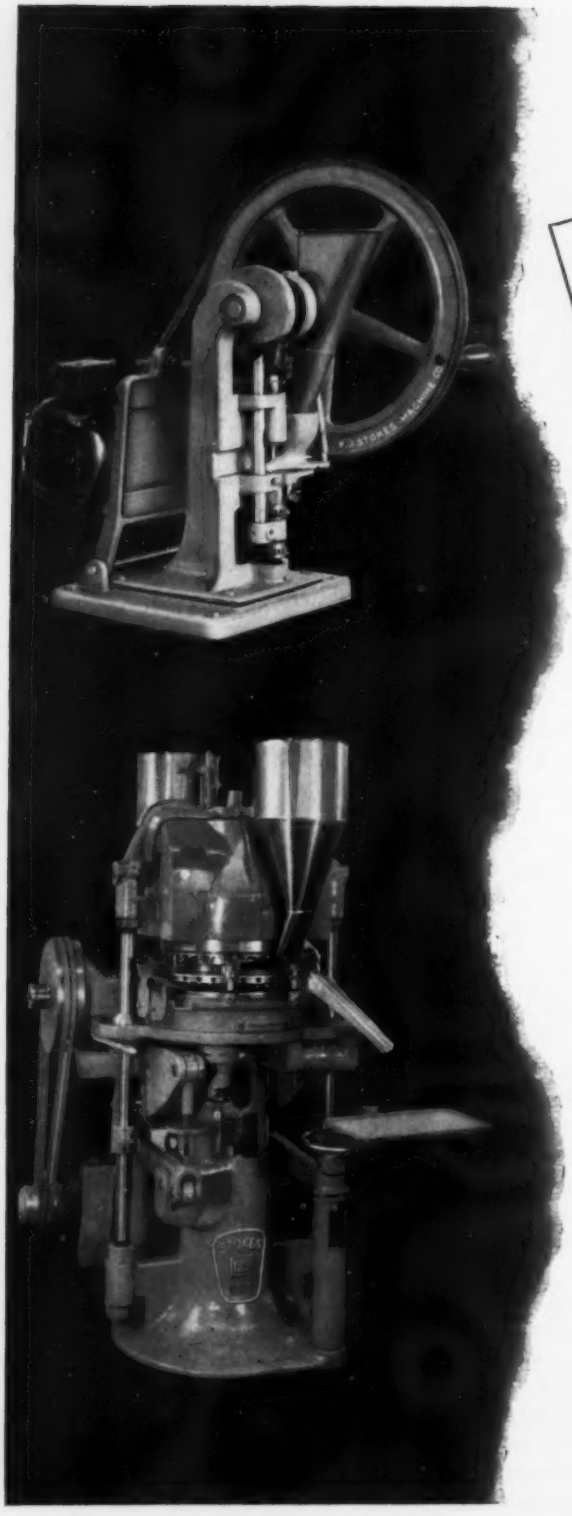
This incident focuses a condition which is pretty general in all branches of the industry. It is a very simple matter to add an item to a line, but it is one hell of a job to get rid of one. It is probably not too far off to say that all sales departments are more volume-minded than profit-minded. The average salesman and sales manager can think of more silly excuses for keeping dead items in the line than one can list. Let's review some of them:

A favorite sales fallacy is that a particular company must carry certain items in order to "service the trade." Salesmen will tell you that unless their line contains this or that, they will lose the business of this hospital or that doctor.

In the first place, no organization in the drug or cosmetic industry is big enough to serve the industry in a general sense. Somewhere a line must be drawn. When you consider the fact that to service retail drug business would probably require 150,000 items of all kinds, it becomes at once apparent that no one house could possibly "service the trade." So, if a limit must be set, at what point shall the limit be established? I should say that the limit should be placed as close as possible to the group of basic products in the line which produce the major portion of the profits.

I think it is ridiculous for a large ethical drug house to carry in its catalog cosmetic items such as cold cream, talcum, or even medicated soap when it does not and cannot do, on these items, any substantial volume of business at all. Likewise, I think it is a fallacy for a company selling its own brands to manufacture private label or private formula merchandise for its customers on the ground that it is performing a "service." There must be private label and private formula merchandise, of course, but there are firms in the industry which make a specialty of this type of business and they should get it all.

I well remember on one occasion persuading the president of an outfit to discontinue the sale of private formula and private label merchandise in a particular territory for a period of one year, as the outcome of a bet I had made him that sales on his own regular line products would go up the very moment he got rid of the private formula and private label items that were impeding the efforts of his men and preventing their concentration on their own merchandise. He agreed to it, the test was made, and at the end of a year sales on his own merchandise were up thirty per cent. It is needless to say that when the test was announced, the salesmen in that territory and the district manager yelled bloody murder. They offered very persuasive arguments—all focusing on the fallacy that if a manufacturer fails to supply a private label item, the cus-



WHAT ARE YOUR TABLET MACHINE NEEDS?

Stokes is ready to help you plan to expand, replace and repair war-worn tablet manufacturing equipment.

Whatever your needs—experimental tablet machines for research, up to large rotary machines for high-speed production—Stokes builds equipment to supply them.

For 50 years we have designed and built automatic machines for compressing pharmaceutical and other tablets—machines which, today, are standard equipment throughout the world.

Stokes Tablet Machines embody many unique features. Typical are the Automatic Excess Pressure Release on rotary and larger single-punch models, Anti-Capping Devices, and means of producing ball-shaped and perforated tablets. We also manufacture complete auxiliary equipment for tablet manufacture.

Come to Stokes for tablet information. We have machines in production, the experience, the technical knowledge and the laboratory facilities to help you.

F. J. STOKES MACHINE CO.
5932 Tabor Road, Philadelphia 20, Pa.

Illustrated: *(Top) Eureka single-punch bench model Tablet Machine. (Bottom) "BB-2" Rotary Tablet Machine for high-speed production up to 1500 tablets per minute.*

50th year of Service to Industry

F.J.Stokes TABLET MACHINES PHARMACEUTICAL EQUIPMENT FJS Est. 1895

tomer will not buy that manufacturer's own label merchandise. It's all poppy-cock.

I think it is a serious admission of weakness on the part of any salesman or sales manager to insist that he cannot sell his own merchandise without the aid of private label and private formula items. He must be a very poor salesman indeed, if he must give, in order to sell his own products, a left-handed discount in the form of private label merchandise which is generally sold at, or actually below cost.

In any event, I cannot understand why any salesman should wish to build up competition for himself by promoting the sale of private label and private formula items. For the life of me, I cannot see why any reputable established manufacturer should give a potential competitor the benefit of his manufacturing experience; the benefit of his "know-how" in label and legal matters and the benefit of his research and control facilities because, among other things, he is in many cases assisting a potential competitor to become established without any investment in laboratory and plant facilities.

You all know of a number of products which are phenomenally successful from a sales standpoint that are made as private formula items. In many cases these products succeeded only because their originators did not have to make a substantial capital investment in plant and other facilities. Their competitors put them in business!

Another great fallacy in sales thinking is that private label and private formula items help to absorb overhead. As a genuine thing that is all poppy-cock too. Actually, such items tend to multiply overhead. The size of a company's plant, the size of its office facilities and its laboratory facilities will generally be in proportion to the size of its line. One big thing that is overlooked in these cases is the cost of assay work. Generally speaking, costs on a private label item are computed by adding to the cost of raw and packaging materials an estimated amount of labor plus a small percentage for factory overhead. Every item that is put through a plant regardless of whether it is a regular line item or a private label item, must receive the same degree of attention and paper work and laboratory assay as every other product.

As a rule, however, items which do not belong in a regular line require far more attention and far more correspondence than a regular line item. Regular line items are produced on a production basis more or less automatically. Private label items usually require a lot of correspondence even before the first batch is made. The order must be acknowledged, arrangements must be made for special labels and packaging materials. This requires a lot of work on the part of the purchasing department and a lot of correspondence not only with suppliers, but with the customers and possibly also with the customer's advertising agency. Then when the batch is put through the plant it usually follows a special course because as a rule, such batches are smaller than regular products. As a rule they require special set-ups of packaging machinery. In the stockroom they require special segregation and special attention again. When the order has been completed it must be billed, and if there are any differences or discrepancies, additional correspondence ensues. But the cost of the private label item never bears such charges.

In one instance, at our suggestion, a regular manufacturer determined to make a special study of the cost of turning out private label merchandise. Two hundred and seventy-five orders were selected at random. These were carefully followed through the plant on a time study basis. When this study was completed, it was discovered that the manufacturer received his actual out-of-pocket expense on only seventeen orders! All the rest were being handled at a loss. What is more interesting is the fact that when these orders were tabulated, the amount of the company's regular merchandise which each particular customer had purchased the previous year was listed in a separate column and only six of the two hundred and seventy-five private label accounts had ever purchased any company merchandise! In this instance you can bet that the situation was overhauled in a hurry. But as a result of private label merchandise, the company had, in the course of time, added space not only to operating facilities but to clerical and laboratory facilities as well, in order to handle the volume of work going through. These increments are added gradually and never are recognized as the result of increasing private work volume.

There are private label companies, and there always will be, who are geared to provide service for individuals and organizations who cannot or do not wish to make an investment in plant facilities. To them again I say should go all of the private formula and private label business.

The same falacious sales thinking applies with equal force to regular line items which have become outmoded or which never made the grade at all. I have recommended to my clients that a "kill committee" be established to keep the barnacles out of the line by repeated pruning. Few clients have the courage to do it adequately. They discover upon analysis that the dead item renders at least a paper profit; they also discover that when the item was added to the line they were somewhat too enthusiastic in the purchase of packaging materials and, as a consequence, have on hand enough materials to keep the item in the line for several years. It hurts a manufacturer to throw away good packaging material because the loss thus entailed shows up on his books. But the intangible loss involved in keeping the item in the line does not show up on his books; therefore, he doesn't feel he is being injured by the continuance of the dead item, but actually he is.

It is funny how salesmen will fight to keep dead items in the line long after they should be scrapped. They will tell you that such items must be continued also as a service. From a common sense standpoint I can't see how much service is performed by an item of which only a few hundred or a few thousand dollars a year is ever sold.

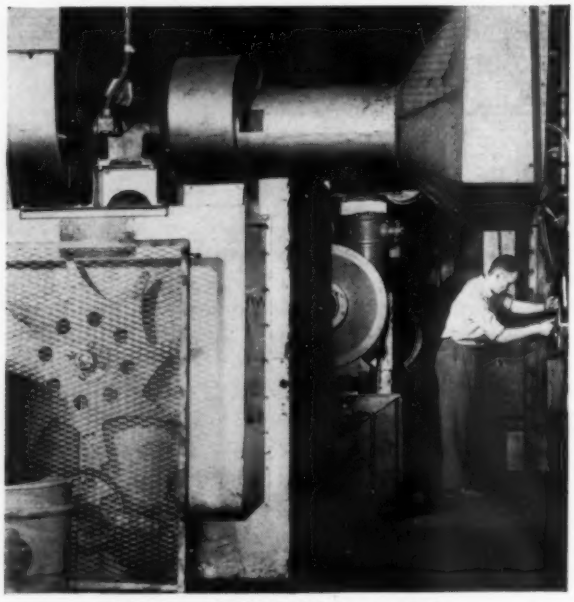
An old timer said,

"WHEN MY BONES BEGAN TO ACHE, WE COULD EXPECT TROUBLE"

A chemist's experience with too much moisture in the air

Your packing room workers don't need "aching bones" to tell when the humidity is too high. Powders cake up and won't run down feeders and spouts, to name only one of the symptoms. The cure? Keep the humidity low with the help of Lectrodryers.

Just a trace of water in the air, gases or organic liquids you're working with may upset processes or damage your products. Lectrodryers remove moisture to dewpoints as low as −110° F., or work with automatic controls to maintain atmospheric humidity at constant levels.



This Lectrodryer feeds DRY air as required.

Lectrodryer engineers will help you adapt these DRYing machines to your processes. For this assistance, write Pittsburgh Lectrodryer Corporation, 300 32nd Street, Pittsburgh 30, Pa.

In England: Birlec, Limited, Tyburn Road, Erdington, Birmingham.
In Australia: Birlec, Limited, 51 Parramatta Road, Glebe, Sydney.

LECTRODRYERS DRY WITH ACTIVATED ALUMINAS

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CORPORATION

Another very prevalent fallacy about such items is that it is necessary for one manufacturer to carry the product in his line simply because a competitor also is carrying it. That's really how barnacles get into the line in the first place.

Whenever a new item is added to a line, one or more items that have begun to die should be eliminated. The size of a line should be restricted, as much as circumstances will allow, to permit the sales force to concentrate on a few items. A sales force can do a very much better job of selling when it can concentrate on a few dozen items instead of a few hundred. A line must, of course, be large enough to perform a trade service within the limits of a rigidly defined company policy. For instance, a cosmetic treatment line must have a certain number of items in order to give a treatment. A physician's supply house must have a much larger number of items than a specialty house, and a biological outfit must have a minimum number of biological products in order to justify its existence; but none of these outfits need attempt to cover the whole field.

It is obvious that every manufacturer cannot be a specialty manufacturer, but by the same token, there would be more items of a specialty nature, that is to say, large volume items, if every manufacturer would stop selling dibs of this and dabs of that. If such items are needed by the trade at all, one or two manufacturers can do a good business in the supply of them. But when dozens of manufacturers carry the same staple item no one does any business in it and it becomes a nuisance to everybody, especially to the production men.

Retirement Plans

During the recent Chemical Show I participated in a very interesting discussion of retirement plans. I have written on this subject before and at this meeting I expounded my views which touched off a lively discussion that lasted for several hours.

I do not favor any of the retirement plans I have seen to date. I think every manufacturer should have a retirement plan, but the plan should be one thing for ordinary employees and another thing for executives. A workman who has devoted a lifetime of loyal service to a particular employer should be cared for by that employer after the workman has reached an age at which he no longer can perform his duties with maximum efficiency. I think the retirement age should be 60 instead of 65 because the majority of manual workers become more or less infirm around 60 years of age. In any case, if you are going to reward a man for his services by providing a retirement wage, then you should give him the wage at a time when he is still vigorous enough to enjoy his retirement.

I think the plan with respect to executives should be entirely different. By "executive," I mean any man who is entrusted with management responsibilities, who has several people under his direction and is earning $5,000.00 a year or more.

I think an executive retirement plan should become automatic at the age of 50, at the option of the management. Likewise, at the age of 60 retirement should become actual, but again the management should have the option of retaining the services of any executive as a consultant only having no authority whatsoever and being responsible for the conduct of no department.

There are several reasons for this feeling.

The one bad feature of any retirement plan is that it tends to stratify if not petrify management. I have seen more dead-heads coasting along waiting for their retirement to come up than would patch hell a mile. The danger of this is that the younger executives following along behind become discontented and quit. That is why I feel that management should be in a position to retire an executive automatically at 50 when he still can get a job somewhere else. I have known several men whose companies would have saved money had they retired these fellows at 25 instead of 65. I have seen a number of companies lose excellent talent simply because progressive, intelligent men will not hang around for ten or fifteen years waiting for some dead-heads to retire.

Automatic retirement at 50, at the company's option, would provide a way out in many cases. It is all very well to say that if an executive is really a dead-head and the management knows it, to fire him. But after a man has been in harness for fifteen or twenty years, firing him produces bad repercussions in the organization because the people down the line regard the incident as an attempt, on the part of the management, to avoid paying the man's pension, or they feel quite properly, that if the man deserved firing he should have been fired long ago and should not have been permitted to remain for twenty years until he has reached the time of life when he cannot easily get another job. Likewise, it produces organization repercussions to jump a younger man over the head of an older one. The action is misunderstood down the line because few managers are big enough to take their entire personnel into their confidence whenever such actions become necessary.

I have said repeatedly that if a man is capable and intelligent and cooperative when he is young, age and experience will improve these qualities tremendously. Therefore, I feel that when such a man reaches the age of retirement, whether it is 60 or 65, the management should have the right to exercise its option of continuing him as a consultant in order to enjoy the benefits of a brain which has become sharpened in the company's service. I do feel, however, that in order to provide for the younger talent all executives should automatically be relieved of authority and responsibility at the age of 60 and thereafter should have the status of consultants for as long as they may wish to continue. It has been said that a retirement plan never should be automatic because some men have made such a hobby of their business that they will die if they are not permitted to continue for as long as they can walk about. I think this is not so and it is not borne out by the insurance statistics.

The basic problem of management is to provide for

Alsop's New "SEALED-DISC" FILTER In Stainless Steel, Monel Metal, Bronze, etc.

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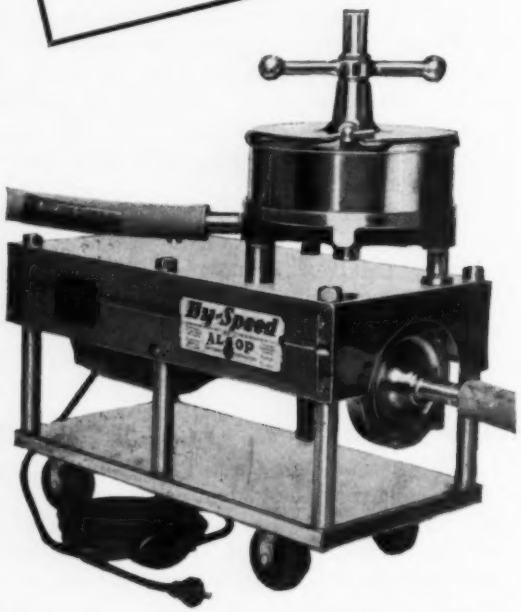

The unique and simplified design of the "Sealed-Disc" filter makes it particularly practical to construct it completely of Stainless, Monel, Bronze or Special Alloys to meet specific conditions and at surprisingly low cost. Add this to the remarkable features that have already made Alsop Filtration so successful wherever liquids are to be clarified.

It's no wonder so many of our users say, "The Sealed-Disc filter has all we want and more."

THE ALSOP "SEALED-DISC" FILTER OFFERS MANY ADVANTAGES

1. Completely enclosed, air-tight unit, eliminating loss through leakage or even by evaporation.
2. Exceptionally small space requirement. For example, a 600 gals. per hour filter complete with electric pump requires only a 9″ x 20″ floor space—a 2000 gals. per hour machine requires only 12″ x 24″ of floor space.
3. Filter discs easily changed when clogged with dirt or when products handled are changed. A very few minutes does the job.
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Our Engineering Service plus our Laboratory facilities have been very helpful to many of our customers. Perhaps we can help you, too. We'd like to try. Just write us giving details of solutions to be clarified, there's no obligation.

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In addition to the discs for our own filters, we can supply discs or sheets cut in any shape and size to fit other type filters.

the perpetuation of the business and this can only be done by developing bright brains and by trimming away dead wood constantly. When you study the history of firms in our trade and in other trades as well, you will observe that they follow pretty much the same curve pattern. At the beginning and for several years there is the curve of growth, usually stimulated by the aggressive personalities who launched the business. Then follows a more or less prolonged leveling off. Eventually, a period of decay sets in and gradually the company heads toward extinction. The curve may span a period of fifty years or it may span a period of one hundred years, but it seems to be pretty regular in its pattern. In every instance of decline, the story is the same: the failure of the management to keep the organization alive and vigorous and growing by getting rid of the dead-wood and by infusing new brains into the organization from time to time.

I think, in all fairness to everybody concerned, that a retirement plan can be made to accomplish these objectives. It can provide the means by which management can get rid of its dead-wood without upsetting its organization and thereby establishing an incentive for up and coming younger executives to stay on. On the other hand, the consultant arrangement makes it possible for management to continue enjoying the benefits of brains which never really grow old.

Committees

Every now and again I run into an instance of committee management which makes me beller. I do not know of a better way of impeding progress than to go whole hog for committee management. The trouble with committee management is that someone at the top reads an article about the subject in some trade magazine and then decides that from that point on he will "committeeize" the whole organization. From then on, no decision is made without discussion by one or more committees, which may in turn appoint sub-committees. At Purdue University I was told that the committee system got so bad out there that finally the president appointed a committee of committees to coordinate the committees.

It is obvious, of course, that a sizeable and more or less complex business cannot be operated without close coordination. The only way coordination can be achieved is for divisional heads to get together at intervals and discuss their inter-related problems. Business really was always conducted on this basis even before anybody thought of applying the term "committee" to such a method.

The president of a company must, of course, have an executive committee consisting of the various divisional heads of the business. Sales must be coordinated with production and both, in turn, must be coordinated with advertising and with finance. Basic committees of this sort, consisting of responsible executives are essential and necessary.

It is when the one or two top committees begin setting up other committees that the trouble comes and the delays occur. So, I would like to make a few suggestions as to how to set up committees, or as I like to call them, operating groups, to avoid the danger of delay and indecision.

In the first place, a committee should always be headed by an aggressive dynamic executive, having authority to act. In the second place, the membership of the committee should consist only of people who are qualified by reason of training or experience to participate in the discussions of the committee in an intelligent way. The committee should not meet a regular intervals, it should meet only on call of the chairman. The membership of committees should not be fixed. The chairman should decide who shall sit at any particular committee meeting and at his discretion he can add to the committee other individuals whenever it becomes apparent that for a specific purpose their opinion or experience is needed. Minutes of every committee meeting should be recorded and these minutes should be sent to every committee member even though he may not have been present at a particular discussion. A follow-up system should be instituted so that decisions of the committee will be carried out.

It wastes time to have committees meet on a regular basis. When committees meet on such a basis they usually develop into gossip fests. A committee meeting should consist only of persons who have something to contribute to a particular discussion. It is wasteful to have the advertising man sitting in on the discussion of a new production development when he can contribute nothing to the discussion. As a matter of interest he might wish to know what is going on, but this information would come to him from the minutes of the committee meeting. In a sales committee meeting it serves no useful purpose to have the company comptroller sit as a regular member, but there might be occasions when accounting data would be required and in such cases, the comptroller could sit at a particular committee meeting as a guest.

The chairman of the committee should have authority to act and act promptly. Whenever possible, a definite decision should be reached at every committee meeting and the chairman should be very chary of appointing sub-committees because the appointment of sub-committees means more committee meetings at a later date. Committees should be rigidly limited in number, otherwise you presently will find yourself with a housekeeping committee, a safety committee, a laundry committee, a grounds committee, and a mechanization committee, and God knows what else besides. I shudder when I go into a plant which is afflicted with "committeeitus" because I know that my recommendations will be discussed by one committee after another and that nothing will be done on schedule, if at all.

In one instance, a simple recommendation which would have cost not above $250.00 to put into effect was "in committee" for two years actually before anything was done about it.

Let's coordinate and stimulate, but for God's sake

let's not emasculate our organizations by piling one committee on top of another.

Flexible Ducts

Spiratube Division, Warner Brothers, Bridgeport, Connecticut, manufacture flexible tubing which is noncollapsible under plus or minus pressure and is retractable to about 1/8 of its extended length. No exposed metal inside or out. Little resistance to air flow and no obstruction to passage of solids. Sharp bends may be obtained without elbows or fittings. At present it is used in dust collecting systems, in wood working plants and also in flour mills.

Shriver Pressure Filter

Enclosed tank, horizontal plate type for any filterable material: clarification, decolorizing, purifying, recovery of solids, extraction, etc. Use any filter media: paper, cloth or asbestos pads. Use any filter aids: diatomaceous earths, Fuller's earth, activated carbon, etc. Leakproof and vaporproof—filtration unit enclosed in hermetically sealed tank. Horizontal filter plates—permit building up a uniform cake that will not drop off, so that filter may be stopped and started as often as desired without running turbid. Ample cake capacity—recess in plate can be made of any desired depth to permit building up of cake of any required thickness.

Center feed—slurry fed through center of plate and clear filtrate discharges into tank.

No unfilterable material in tank—only clear filtrate. No residue. No chance of contamination.

Easy to clean—smooth, welded steel tank easily cleaned of filtrate. Filter plates easy to remove singly or as a complete cartridge. Quick easy reassembly—filter medium and cake readily stripped off, new filter medium applied and plates reinserted into filter in minimum time. Or, a complete spare cartridge of plates may be inserted while full cartridge is being cleaned.

Fast flow rate—up to 60 gal. per. sq. ft. of filtering area per hour. Actual rate depends on nature of material.

Versatile—will filter any fluid from the lightest, most volatile material to heavy or viscous materials.

Maximum pressure—up to 50 lbs. per sq. in.

Any temperature—tank may be jacketed for circulation of steam, oil, hot water or brine to control desired temperature of fluid during filtration.

Built of any material—standard units are made of steel tanks and cast iron plates, of all aluminum or stainless steel, but special units may be made of bronze, nickel or other alloys, plastics, etc.

Cast filter plates—the strongest, most rugged construction; cannot bend or spring out of shape, yet are relatively light and easily handled.

Complete, compact, portable unit—assembled with pump of any type and with piping, on stand and casters, occupying minimum floor space and easy to move anywhere. Standard filtration unit consists of a 12 chamber filter (12 plates). The number of plates may be greater or fewer as required. Outside diameter of plate is 16½". Filtering area per plate is 1.27 sq. ft. Total filtering area of 12-plate unit is 15.25 sq. ft. with flow rate up to 900 gal. per hr. Cake thickness is ½". Cake volume per plate is 0.053 cu. ft. Volume of 12-plate filter is 0.636 cu. ft. The approximate weight of each plate—aluminum, 5½ lbs.; cast iron, 14.5 lbs.; stainless steel, 15.5 lbs.

This filtration unit may be made with plates of 24" outside diameter in any required number, as per the following specifications:

Filtering area per 24" plate—2.7 sq. ft. Flow rate up to approximately 162 gal. per plate per hr. Cake thickness is ½". Cake volume is .11 cu. ft. per plate. For thicker cake, volume is directly proportional.

T. Shriver and Company, Inc., Harrison, New Jersey.

Aluminum Truck

Northrop Gaines, Incorporated, 1985 East 16th Street, Los Angeles, California, manufacture hand trucks and industrial wheels. These wheels are made of cast aluminum with rubber molded on and are obtainable in various diameters. They weigh as little as 3 pounds and are built to carry 40% more weight than any steel wheel of equivalent size. Also, this firm manufactures a line of featherweight hand trucks, the smallest weighing 36 pounds, and this is said to have been stress-tested under a load of 5,000 pounds. Some day I hope someone will bring out a line of aluminum pallets. Wood pallets cost about $2.50 each and they splinter badly.

Markomatic Code Dater

This new product for code dating and control numbering, color, flavor or variety marking is called our Markomatic Code Dater. This ingenious machine marks flat paste-end or tuck-in cartons; envelopes; cellophane, draft, heat seal, foil or lined bags; tags and labels, at a phenomenal production rate with extreme accuracy in placing its impression. The components to be marked are placed in small stacks in the infeed magazine, marked and piled in an outfeed trough.

The ability of the Markomatic Code Dater to separate thin paper, thick cardboard cartons, or medium thickness bags is amazing. Its separating section, properly adjusted, makes skipping impossible. The unique method whereby the rotary die is started in motion and is prevented from making second impressions, regardless of the length of the object, is ideal for careful location of impressions.

The size of the items that the Markomatic Code Dater may imprint is limited to 3" minimum length for one model and 4½" for another. There is practically no reasonable restriction on the maximum length or maximum or minimum width. Four standard models are made for control numbering or dating. Other models, for almost any marking, are furnished with little adaptation of these standard ones. Adolph Gottscho, Inc., Sales Office, 1 Hudson Street, New York 13, New York.

EPPENBACH HOMO-MIXER MAKES DISPERSIONS WITHOUT INCORPORATING AIR

1. Turbine head near bottom of tank starts a converging horizontal flow which carries sedimentary material into close-fitting rotor vanes.
2. Inflowing "slurry" is violently agitated at high velocity and projected upward toward surface.
3. A submerged baffle-plate deflects the rising current horizontally toward sides of tank, thence flowing downward toward bottom.
4. Rapid down-flow submerges and wets out floating material, including additives being fed into the mix.
5. The entire batch is deflocculated resulting in a perfect dispersion.
6. No surface boil . . . no vortex . . . NO AIR DRAWN IN.

The Eppenbach HOMO-MIXER is built on an entirely new principle. Whereas ordinary mixers create a vortex in the material that pulls in air, the HOMO-MIXER draws only from the bottom of the tank. Entrapped air tends to cause separation and splitting, and frequently oxidizes the product.

Furthermore, the HOMO-MIXER does not require a high head of liquid to give efficient mixing action. It is possible to process material in a tank at a depth just great enough to cover the mixing head. Fits tanks of all types and shapes . . . no clamps required . . . no special angle of installation.

Write for complete details of this mixer—"the only one of its kind." Ask for Catalog No. 402.

Eppenbach HOMO-MIXERS are available in a complete range of sizes for laboratories and production plants. Capacities range from 2 to 2,000 gallon batches from ¼ to 25 H. P.

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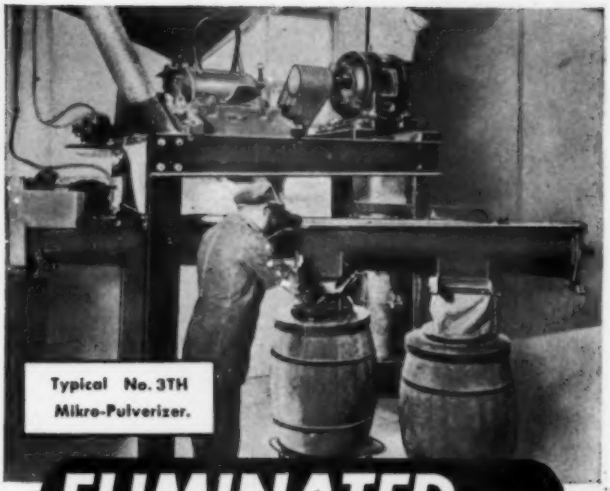
Processing Equipment for Over 30 Years


Typical No. 3TH Mikro-Pulverizer.

ELIMINATED—
. . . 2 classifying screens
2 mills
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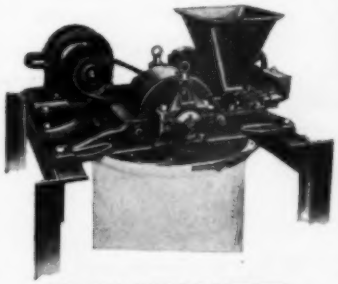
THIS impressive list of equipment was replaced in the plant of one manufacturer with the installation of a MIKRO-PULVERIZER. In addition, cleaning time was reduced from 6 hours down to 30 minutes.

Such savings among MIKRO users are not unusual. These and similar advantages all stem from a design especially suited and guaranteed for each individual application—from a report and recommendation made only after careful test and check of the user's material in our laboratory and test grinding department—the services of which are available without cost or obligation.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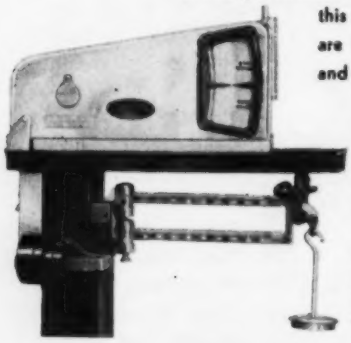

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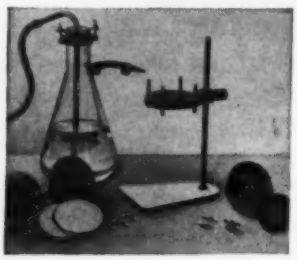

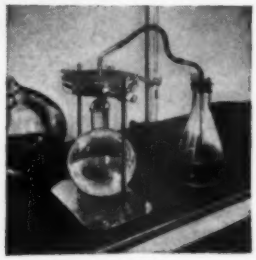

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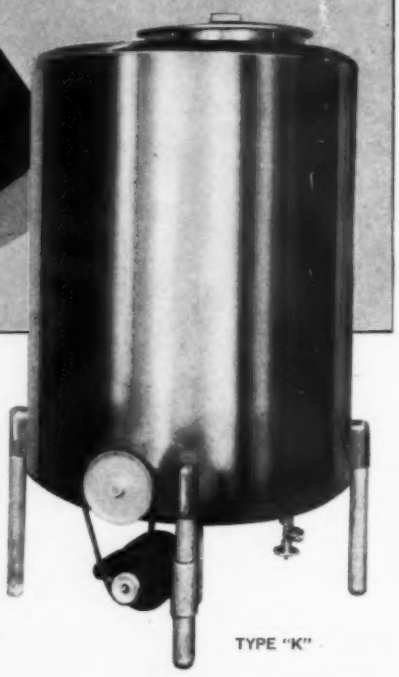

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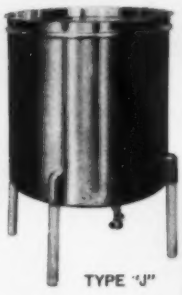

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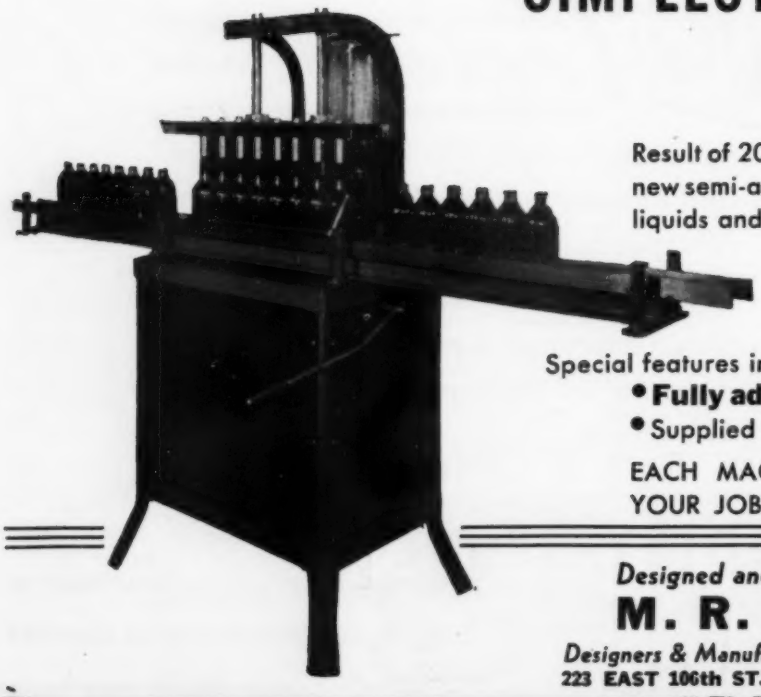

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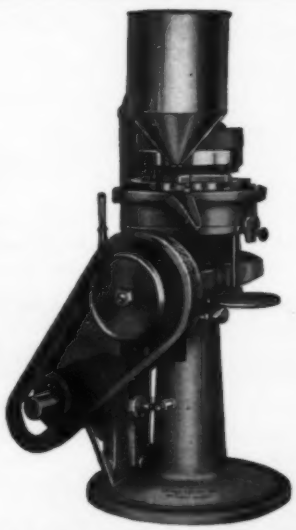

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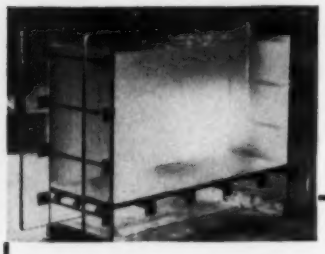

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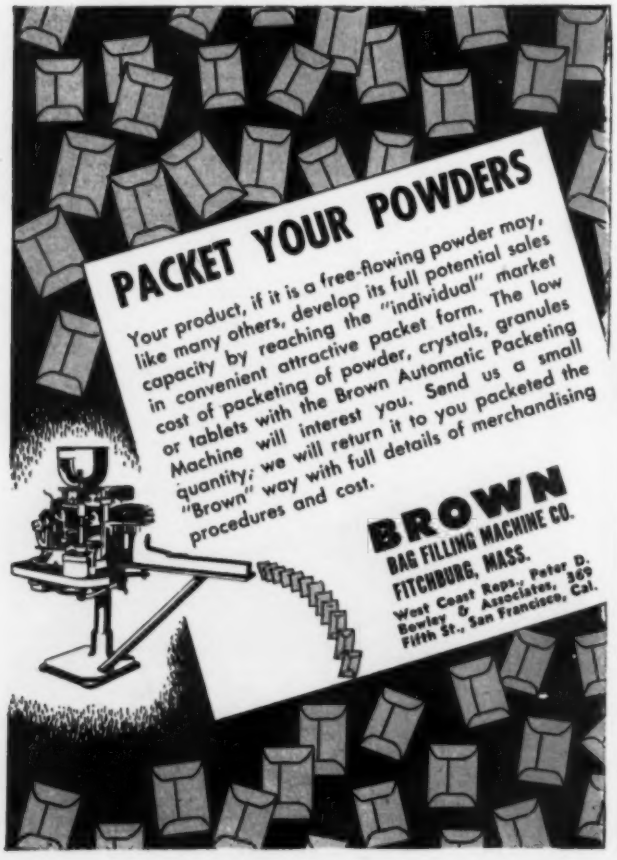
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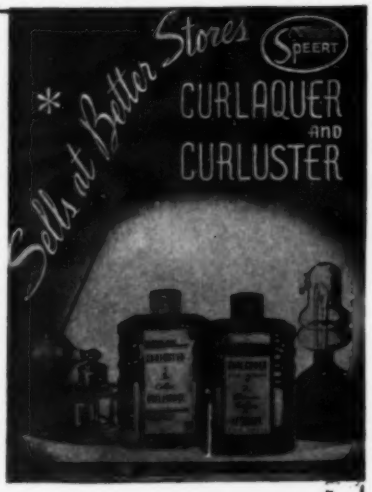

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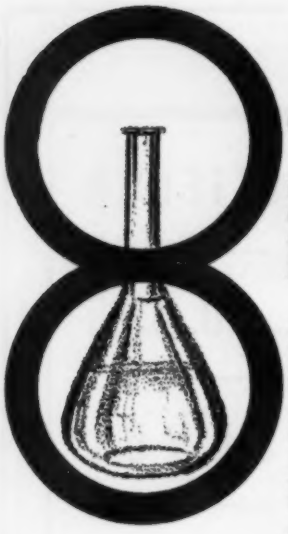

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Compounder's Corner

Creams for Tropical Climates

Writing in *Soap, Perfumery and Cosmetics* (18:630, 1945), H. Janowitz remarks that creams suitable for temperate climates frequently prove failures in warmer countries like Egypt and India. Citing the disadvantages of vanishing creams in tropical climates, he notes that there is a tendency in Palestine for women to use water-in-oil emulsions in preference to those of the vanishing cream types and powder foundation creams. In this connection he mentions the formulation of a rather heavy cold cream consisting of:

Beeswax	23.75%
White oil	25.00%
Borax	1.25%
Water	50.00%

From the tropical point of view, Janowitz sees no reason why water-in-oil types of creams cannot serve for day use as well as for night application. He points out that water-in-oil creams can be obtained without any undue gloss, greasiness or sheen. With such creams, lubrication provides at least one useful effect, and such creams may also benefit the skin. Noting that the grease-absorbency of kaolin offers possibilities for application in powder creams, he offers the following mixture as one providing a product which is not greasy:

Hydrocarbons	50.0%
Kaolin	30.0%
Zinc oxide	20.0%

Another and better composition is:

Lanolin	20.0%
Hydrocarbon mixture	20.0%
Water	60.0%

Add to this a powder containing not less than 50 per cent kaolin. Without the powder, this cream has advantages as a powder foundation. It may be made even finer with absorption bases, wool wax and wool wax alcohols and certain other water-in-oil emulsifiers.

Attempts have been made, in preparing creams for tropical and subtropical countries, to substitute oil for glycerine and glycol. One solution, resulting in the formation of a cleansing lotion or cleansing milk, is a water-in-oil emulsion with 20 to 29 per cent oil, 60 to 70 per cent water, and a soap (usually triethanolamine stearate) as an emulsifier. Reports from many women indicate that they use a product of this type as a cleanser and as a powder foundation in summer-time with great success. This liquid has the advantages of not drying out as a cream does. Apart from its properties as a powder foundation, it keeps the skin smooth and lubricated. It can be made in two ways: either with an increased soap content for improved cleansing properties, or with a lesser degree of soap and the addition of cetyl alcohol or lanolin for smoothnig and nourishing purposes. By means of suitable additions, many varying products can be derived from this single formula.

Antiperspirant Creams and Fabrics

The effects of antiperspirant creams on fabrics has long been an important consideration in the manufacture and use of this class of cosmetic products. Hence the importance of a comprehensive report on this subject presented by R. R. Bien at the winter meeting of the Toilet Goods Association and published in detail in the Proceedings of the Scientific Section of the T. G. A. (*Number 4, 1945*). *With evidence that fabric damage was likely to occur from contact with antiperspirant creams of low pH, a series of investigations were undertaken to provide the answers to a number of questions. To this end, a number of creams were applied in varying amounts to different types of fabrics and these were maintained under different conditions of time, temperature and humidity. The effect of ironing the treated material, with and without preliminary laundering, was also studied. The conclusions from these studies were:*

1. Silk, wool ane acetate rayon are highly resistant under all practical conditions.

2. Linen, cotton and viscose rayon are extremely vulnerable.

3. Maximal damage is produced by ironing without preliminary laundering. Creams which contain no buffering ingredient will usually cause complete destruction of cotton, linen and viscose rayon when so treated.

These investigations, plus practical tests with human subjects using antiperspirants and wearing special dress shields, indicated that most products fell into two main categories; e.g. those which contained a buffering ingredient and those which did not. The former gave uniformly satisfactory results from the standpoint of fabric destruction, while the latter usually caused disintegration of the fabric upon ironing.

During the war, as a result of raw materials shortages and changes in formulae, new problems have arisen. Among the most important, and one still under investigation, is the tendency of some emulsion to breakdown and "bleed" into the fabrics. This has resulted in considerable fabric damage in many instances. Hence, Bein stresses that the importance of every single ingredient in an antiperspirant cream may not be appreciated fully. The composition of the base material is fully as important as the proper balance of aluminum salt and buffer. To change any single ingredient or its concentration in a satisfactory formula, she warns, is to risk increasing the fabric destruction potential from a safe to a dangerous level.

Noteworthy are the details given in the report on laboratory and practical methods for determining possible fabric destruction by antiperspirant creams.

Veterinary First-Aid Powder

According to the *Agricultural News Letter* for January-February 1946, reports of the successful application to livestock of a war-developed urea-sulfa powder tend to bear out earlier predictions that this new medicament will largely supplant present methods of treating wounds of farm animals. The formula, developed by the Office of Surgeon General of the Army, is as follows:

Calcium phosphate	2.0%
Pure crystal urea	83.0%
Sulfanilamide	13.0%
Sulfathiazole	2.0%

After dusting a wound with this powder, some veterinarians like to apply a

wound balsam as a protective covering to keep dirt out. Though found to be highly effective, this powder has its limitations. Active against most of the common infective organisms, it is not effective against the organism responsible for tetanus or lockjaw. Farmers can make good use of the powder on a first-aid basis, but severe injuries require the attention of a veterinarian.

Improving Powder Adherence

Improvement in the adherence of cosmetic powders and products containing powders forms the basis of U. S. Patent 2,373,933 granted to C. Weeks. This improvement is achieved by encasing finely divided particles of body powder in a film formed of bentonite and methyl cellulose. This is done by first making a liquid suspension composed of 12 ounces of powdered bentonite and sufficient water to produce a total of 128 fluid ounces. An equal quantity of an aqueous solution of 4 ounces of methyl cellulose is prepared by boiling the solution for twenty minutes and chilling to about 40°F. The bentonite suspension and the methyl cellulose solution are mixed in suitable proportions (e.g. 80:5-25) and more water may be added to regulate the consistency. "Body powder," such as talc, with or without inert admixtures, is added to the above, thoroughly mixed and then dried or dehydrated. The resulting product is said to have excellent adherence and smoothness and lends itself to compounding in final form in dry powder, liquid powder, dry or moist cakes, pastes or creams.

Sulfa-Containing Eye Preparations

In a letter to the *Pharmaceutical Journal* (155:298, 1945), R. E. Knight describes a number of sulfonamide-containing preparations that have proved effective in the treatment of eye infections. One of these, suggested by an ophtholmologist recently returned from the Middle East, has been used with great success in cases of grossly contaminated wounds of the eye. This is made from:

Sulfanilamide	**10.000%**
Sulfathiazole	**10.000%**
Proflavine	**0.025%**
Distilled water	**5.000%**
Anhydrous wool fat, to make	**100.000%**

Eye drops, with sodium sulfacetamide as the active agent, have been made according to the following formula:

Sodium sulfacetamide	**10-60%**
Chlorocresol	**0.025%**
Distilled water, to make	**100%**

A sulfa-penicillin powder for insufflation is prepared by mixing 100,000 units of penicillin with 5 Gm. each of sulfanilamide and sulfathiazole.

Rutin Soon Available in Quantity

In a statement issued January 29, 1946, the U. S. Department of Agriculture announced that rutin, a drug with important medical potentialities, is ready for full scale production. Commercial manufacture of rutin, a bright yellow, non-toxic powder, has been made possible by the discovery that the green buckwheat plant is an economical source. Buckwheat superseded tobacco leaves as a likely commercial source when the plant was found to contain 8 to 20 times as much rutin and to cost only a fraction of the price. At present, at least four pharmaceutical houses are planning commercial production of the drug.

According to clinical observations at the Medical School of the University of Pennsylvania, rutin is effective in the treatment of conditions arising from high blood pressure associated with increased capillary fragility. Bursting of weakened blood vessels causes small hemorrhages which may result, when the rupture occurs in the eye or brain, in blindness or apoplexy. Research indicates also that rutin, a glucoside, may have equally unsuspected nutritional values. Further investigation of the nutritional uses is expected, but the studies point to the opinion that rutin could serve the circulatory system in a manner resembling the action of Vitamin C in the growth and hardness of teeth and bones.

New Cetyl Alcohol Booklet

A new booklet describing the properties and uses of cetyl alcohol is announced by Givaudan-Delawanna, Inc., 330 West 42nd Street, New York City. Used in a wide variety of cosmetic to which it lends many desirable qualities, cetyl alcohol is described as an unusual emulsifier for the water-in-oil type of emulsifier. The booklet contains basic formulae for vanishing, cleansing and emollient creams, and points out various other products in which cetyl alcohol is found to be of value, such as acid creams, lotions, lipsticks, brushless and other shaving creams, toilet soaps, shampoos and face powders.

Data on Alcohols Available

"Alcohols" a new booklet containing complete information on fifteen synthetic alcohols has just been published by Carbide and Carbon Chemicals Corporation. One of a series about organic chemical groups, this booklet lists properties, specifications, shipping data, and information about the uses of alcohols, as well as graphs showing the variation of important properties with respect to temperature, their properties in aqueous solutions, evaporation rates, and solvent power in combination with other solvents. A compilation of constant boiling mixtures and a handy bibliography help make this publication important for reference. Copies may be obtained from Carbide and Carbon Chemicals Corporation, 30 East 42nd Street, New York 17, N. Y. by requesting Form 4731.

Cold Permanent Wave Solutions

In U. S. Patent 2,389,755, G. S. Baker describes the formulation of solutions that enable the production of permanent waves in the cold or at ordinary room temperatures. Basically, the permanent wave solutions comprise liquids containing an alkali metal hydroxide, an alkali metal thiocyanate and an alkali metal sulfite or bisulfite. To obtain best results, it is advantageous to include an agent which helps to form a tighter curl; a material like monochloracetic acid or thioglycollic acid being suitable. In addition, it is desirable to employ a stabilizer, which also serves to give a desirable luster or finish to the hair after it has been treated with the permanent wave liquid. Glycerine and various glycols or polyglycols are appropriate.

Of the several illustrative formulas given in the patent, the following permanent wave liquid is as indicative as any:

Water	**75.5%**
Ammonium hydroxide (concentrated)	**5.0%**
Ammonium thiocyanate	**7.0%**
Ammonium sulfite	**11.0%**
Monochloracetic acid	**1.0%**
Diethyleneglycol monoethyl ether	**0.5%**

T.G.A. Standards for Zinc and Magnesium Stearates

On Dec. 10, 1945, the Toilet Goods Association issued Specification No. 16 and Specification No. 17, providing standards for zinc stearate and magnesium stearate, respectively. The Board of Standards of the Association suggests that all purchasers of these materials use these standards as minimum specifications. A test for lead in zinc and magnesium stearate (T.G.A. Method No. 22) is given with Specification No. 16.

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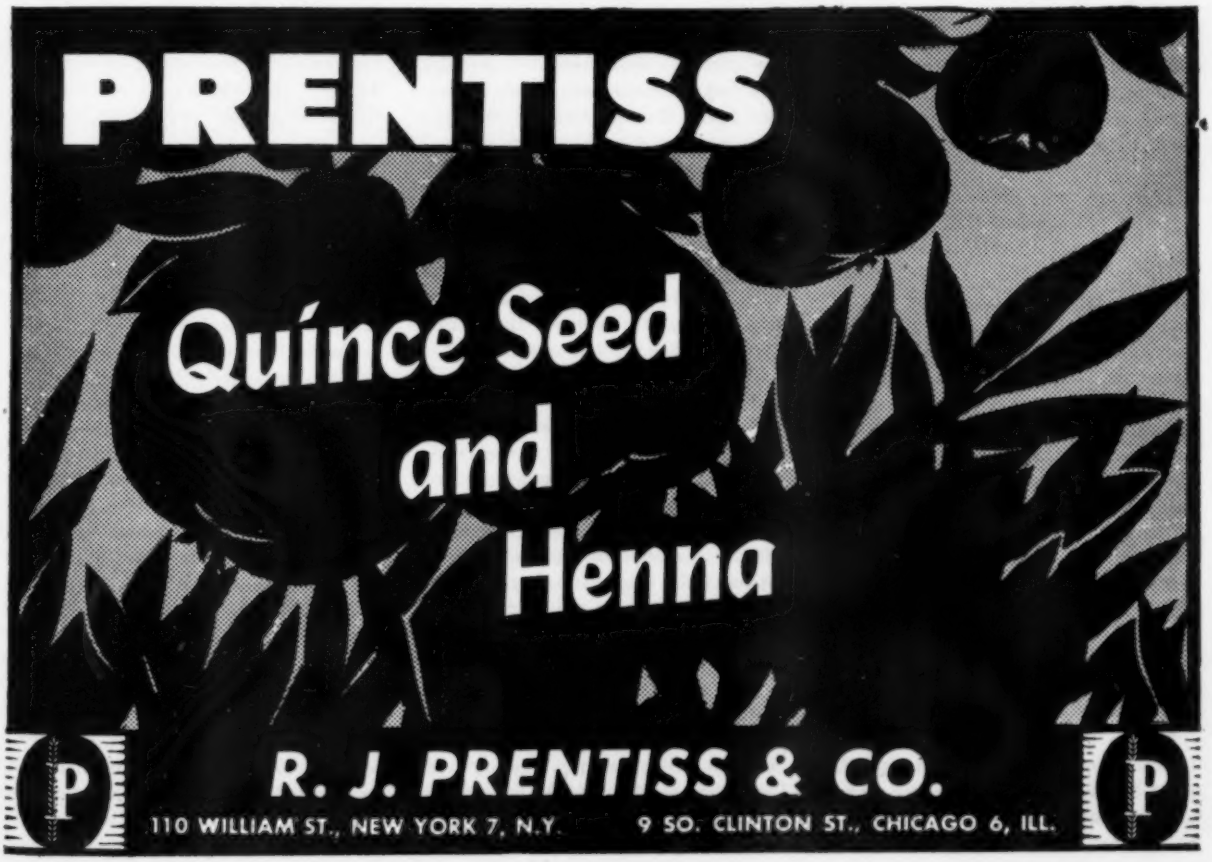

Perfumer's Shelf

Lavender and Lavender Oil

In an interesting and comprehensive discussion on lavender, C. S. Priest (*Australasian J. Pharm.* 26:839, 1945) says that lavender oil is the most widely used ingredient in perfumery today, and its popularity shows little sign of decline. France is the real home of lavender, and tens of thousands of acres of this plant are under cultivation there.

Lavandula officinalis, the real perfumery lavender, is found as a native plant growing in stony declivities of the Provencal Alps in France, and also to a certain extent in Switzerland and Italy. In its indigenous surroundings it is but a poor specimen, but when transplanted to a suitable environment in foreign soil the yield and the quality of the oil increases.

L. spica (spike lavender) is extensively cultivated; its oil is considerably poorer in aroma than *L. officinalis*, and the oil from its hybrids is frequently used to adulterate the original superior oil. It is practically free from esters. Spike itself is adulterated freely with rosemary oil, and the resultant mixture used in cheap perfumery and in certain kinds of lacquer for the manufacture of fine china.

There are many different varieties of lavender. *L. stoechas*, the "holy rosemary" of the Spaniards, is used extensively by the Arabs. *L. pedunculata* yields an oil averaging 40 per cent of total esters. *L. dentata* has a marked odor of camphor. At Bridestowe, Tasmania, two sub-varieties are grown. One of these, called "Fragrans," grows best under dry conditions and in the sunshine, while the other, called "Delphinensis," develops more favorably in the damp and shade. Two types of "Fragrans" are grown; semi-white in color and in two shades. One has a tendency to mauve color, the other to pink. Oils distilled from these two types of flowers indicate that the less pigment in the flower, the less the oil content, but the oil obtained is of a high quality.

Of the many different varieties of lavender, only *L. officinalis* and *L. spica*, and a hybrid of these two, enter into commerce. The hybrid plants yield an inferior oil containing both cineol and linalyl acetate; this oil being known as "Lavandin." The linalyl acetate content of official oil varies, and it is upon this variation in the oil that the market price is determined. The top qualities range from 38 per cent to 45 per cent of esters. English lavender oil rarely has an ester content in excess of 10 per cent, but the foreign oil, notably French, is from 25 per cent to 50 per cent. The esters of lavender oil are those of acetic, butyric and valerianic acids, and traces of coumaric acid. Sometimes benzoic or salicylic acid are added to bring up the apparent ester value.

The chief constituents of lavender oil are linalyl acetate, which also occurs in oil of bergamot and linalyl (linalool) ($C_{10}H_{17}OH$), an alcohol derived by oxidation from myrcene ($C_{10}H_{16}$), which is one of the terpenes.

The refractive index of the pure oil (1.4260 to 1.4675) is a guide to adulteration, with the spike oil that lowers the rotation, although the solubility remains the same; the specific gravity is also affected; these tests also give indications of adulteration with turpentine. Spike oil is also enriched with artificial esters, viz., ethyl succinate and citrate, also terpinyl acetate.

From 0.5 per cent to 1 per cent of oil is extracted from the flowers of spike lavender. The oil is pale yellow, or almost colorless, with a specific gravity of from 0.905 to 0.920. It is dextro-rotatory, and should dissolve in three times its own volume of 70 per cent alcohol.

Calculated as linalool ($C_{10}HO_{17}H$) pure spike oil should give from 30 per cent to 40 per cent of alcohols as estimated by the acetylation process. As pure spike oil requires practically no potash for saponification on account of its freedom from esters, this simple test affords an easy contradistinction from the oil of the official lavender.

New Approach to Camphor Synthesis

The processes for manufacturing synthetic camphoraceous products from pinene are by now quite well known, but the procedure for making synthetic camphor described by F. Schwartz in U. S. Patent 2,389,389 seems to offer a new approach to the problem. This method is characterized by the fact that camphor is synthesized by adding water or the constituents of water to p-cymene. In this process the three double bonds of the p-cymene are saturated by hydrogen and oxygen in the proportion in which these elements occur in water.

In the manufacture of camphor from cymene and water, these two constituents may be dissolved in a medium which is capable of dissolving both of them (e.g. alcohols, aldehydes, ethers, esters and other organic solvents) in the presence of a suitable catalyst like mercury or mercury salts. The reaction is carried out at an elevated temperature, preferably at the boiling temperature of the total mixture. A number of examples of suitable mixtures are given in the patent of which the following is a typical mixture:

p-Cymene	10 parts
Methyl alcohol	50 "
Water	5 "
Mercury sulfate	8 "

This mixture is boiled for about 60 hours with the use of a reflux condenser.

Various other modification in the manufacturing processes are possible. The crude product of the process is usually a solution of camphor in cymene, or, if a solvent has been used, of camphor in a mixture of cymene and solvent. The camphor is recovered from this crude product and further purified.

Lactones in Perfumery

In summarizing his comprehensive, technical review of the lactones and their uses in perfumery, R. W. Moncrieff (*S.P.C.* 18:710, 1945) remarks that the odors of the lactones in general are attractive and pleasant. Particular interest is attached to the macrocylic lactones, particularly those containing about 15 ring members owing to the valuable musk odors that they possess. These are stated to be finer than those of the corresponding ketones. Compounds containing two heterocyclic oxygen linkages (compared with one oxygen link in the lactones) are known as etherlactones and they share with the lactones the possession of fine musk odors. In addition these macrocylic lactones and ether-lactones possess valuable properties as fixatives, and as little as 1 part in 10,000 may be used to enhance the value of a variety of perfumes. The ether lactones are in general capable of being prepared from intermediates that are more readily available than those required for the preparation of lactones of

correspondingly large rings. In the preparation of macrocylic lactones there is usually the danger of forming linear polymers instead of monomeric cyclic bodies, and various devices have been described to guide the reaction to form the cyclic monomer. Chief of these devices are: (1) Depolymerization of the linear polymer by heating with a catalyst, (2) the use of high dilution, (3) the removal of the monomeric cyclic lactone from the reaction mixture as soon as it is formed by arranging conditions so that it is the most volatile constituent of the reaction mixture. Where the lactone ring contains less than eight members this difficulty of linear polymerization is unlikely to arise.

To the student of the relation between odor and chemical constitution it is of considerable interest to note that some lactones with a normal butyrolactone ring system but with a long side chain, say a dodecyl chain, also possess the musk odors characteristic of those lactones which have macrocyclic systems. Whether they are equally valuable to the perfumer is not indicated in the literature and this question might well be worth investigation. Provided that the structures assigned to such bodies are correct, the possibility is opened up that substitutes for the other macrocylic compounds may be found in easier to prepare bodies with a small ring and a long side chain.

A last point is that one or two of its homologues may have finer peach odors than peach lactone itself.

Colorimetric Determination of Coumarin

A colorimetric method for determining coumarin in plant substances has been described in detail by M. Cerny (*Chem. Obsor.* through *Chem. Abstr.* 39:3328, 1945). In his procedure, 10 Gm. of air-dried plant material is cut until it passes through a 1 mm. sieve. Allow the screened mass to soak overnight in ether in a Soxhlet apparatus and then apply continuous extraction for seven hours; adding fresh ether as required. Wash the extract with ether into a suitable vessel and evaporate at 30° C. until only 1 to 2 cc. of a dark green syrup remains. Extract the syrup with 30 cc. of a 2 per cent potassium hydroxide solution for one hour over a water bath with continuous mixing, at 70° C. Without cooling, add 30 cc. of a normal lead acetate solution and mix continuously for 5 to 10 minutes, filter, and wash the precipitate three times with 20 cc. of warm distilled water. To the filtrate add 1.3 Gm. of sodium carbonate, mix well, filter into a 200 cc. volumetric flash, make up to volume with warm water, cool and readjust to volume. Remove 50 cc. of this clear solution to a 100 cc. flask, add 10 cc. of a 10 per cent potassium hydroxide solution, mix well, warm to 70° to 75° C., and after 10 to 15 minutes add 5 cc. of a 10 per cent ammonium persulfate solution, stirring well. Keep at this temperature for another 5 to 10 minutes, and cool under running water. Remove 30 cc. of the solution and compare in a colorimeter with a series of standards containing 0.5, 1, 2, 3, 5, 7, 10, 15, 20, or 50 mg. of coumarin in 50 cc. of water. Readings must be completed within ninety minutes after cooling has begun.

With this method, the average error was found to be only 2.06 per cent of the total coumarins present in plants.

Limonene from Pinene

In U. S. Patent 2,382,641, M. S. Kharasch and W. B. Reynolds describe the preparation of d- or l- limonene, in good yield, from the corresponding d- or l-alpha or beta pinene, this being achieved through catalytic isomerization of pinene to limonene by organic acids under conditions largely preventing the esterification of the acids.

Thus, pinene is heated at temperatures of from 120° to 200° C. with an organic acid and an organic acid amide for a period of time varying from a few to as much as fifty hours, depending upon the reagents and temperature chosen. The reaction mixture is steam distilled to obtain the terpene, which may contain as much as seventy or eighty per cent active limonene plus a little unreacted pinene and a small amount of by-product. The pure limonene is obtained by fractionating the crude terpene. The residue from the steam distillation is made alkaline with caustic and heated to hydrolyze the amide. After clarification of the solution, the acid is recovered in good yield by acidifying the solution and filtering off the precipitated acid.

In a specific example, d-alpha-pinene, 136 parts is heated with benzoylbenzoic acid, 113 parts and formamide, 18 parts for forty hours at 140±2° C. The reaction mixture is steam distilled to recover 128 grams of terpenen. Fractioation of the crude terpene yields 20 grams of unreacted pinene and 95 grams of d-limonene. The benzoylbenzoic acid is recovered by heating the residue from the steam distillation with caustic, clarifying the solution and precipitating the acid by the addition of mineral acid. Acid recovery is good.

Geraniol Esters

In the opinion of N. U. Guba Roy and M. N. Goswami, the cheapest and most abundant source of geraniol is citronella. In their discussion in the *Indian Soap Journal* (through *Soap & Sanit. Chem.* 21:69, Dec. 1945), it is pointed out that under certain conditions the geraniol can be distilled from the oil and esters formed which have the possibility of replacing many of the more costly perfume bases. Citronella oil is obtained from Ceylon or from Java oil. The two oils differ in composition as follows:

Ceylon Oil	%
Geraniol	30-40
Citronellol	15-20
l-Borneol	1-2
Methyl eugenol	7-10
Nerol	Trace
Farnesol and ester	0.2-0.3
Limonene	Trace
Dipentene camphene	Trace

Java Oil	%
Geraniol	26-40
Citronellol	40-45
Citronellal	6-8
Methyl eugenol	up to 1
Citral	2

The difference in physical properties is also evident from the listing given below:

	Ceylon Oil	*Java Oil*
Specific gravity	0.905-0.920	0.882
Optical rotation	0 to − 20	− 2 to − 30
Refractive index	1.475-1.490	1.464 to 1.472
Acetyl-forming constituents	55-60	86-94.9

It has also been found that the Java oil gives a better quality of geraniol and the latter is easier to isolate. Geraniol was isolated and the following esters prepared: Geraniol acetate, benzoate, salicylate, cinnamate, laurate, oleate, phenyl acetate, stearate and nitrobenzoate. Geraniol cinnamate has an odor resembling that of eau-de-cologne. It may be used as a prefixative; a small quantity completely deodorizes alcohol in two hours. Geranyl phenyl acetate can be used as a good fixative with an odor resembling that of ylang ylang. Geraniol laurate has a sweet honey-like odor. Geraniol stearate has a sweet fatty odor intermediate between alcohol and acid and may be used in soap perfumes.

Increasing Yield of Geraniol and Eugenol

According to a note by N. P. Sokolnikov (*Pishchevaya Prom.* 1944, through *Chem. Abstr.* 40:430, 1946) the inclusion of two plates in the still pot instead of one during the steam distillation of geraniol and eugenol from essential oils increases the yields of these products by from 5 to 15 per cent.

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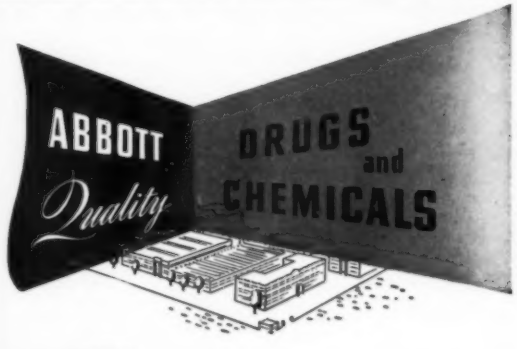

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Vitamins in Ice Cream

Most youngsters, to say nothing of a lot of adults, will be delighted with the report by A. D. Holmes and his associates that ice cream is a good source of vitamins. In their report in the *New England Journal of Medicine* (234:47, 1946), there is described how samples of coffee, maple and vanilla ice cream, manufactured under plant conditions were assayed for carotene, riboflavin and ascorbic acid. The coffee, maple and vanilla ice cream contained 0.09 mg., 0.12 mg. and 0.09 mg. of carotene and 0.27 mg., 0.26 mg. and 0.26 mg. of riboflavin per 100 Gm., respectively. No ascorbic acid was found, probably because of the large amount of air incorporated in commercial ice cream to increase its bulk.

Comparison of these ice creams with numerous widely used foods shows them to be excellent sources of carotene and riboflavin for the human dietary. The nutritive value of ice cream, however, varies with the nature and amount of the ingredients used and the process of manufacture.

Tyrothricin for Pilonidal Cyst

Healing of chronically infected pilonidal cysts through the use of the antibiotic, tyrochricin, is reported by H. Berger (*U. S. Naval Med. Bull.* 44: 952, 1945). Two patients who had been disabled for long periods, after unsuccessful operations, were treated by packing the unhealed wounds with gauze impregnated with tyrothricin in suspension of 33 mg. to 100 cc. Healing was complete in about four weeks. The solution was prepared by adding 1 cc. of a standard 2% alcoholic solution of tyrothricin to 60 cc. of distilled water. In resistant cases a solution containing 50 mg. per 100 cc. may be tried.

Treating Insect Bites and Stings

An interesting and comprehensive review of the various methods used in England to combat insect bites and stings is given by C. G. Learoyd in the *Practitioner* (155:102, 1945). Thus, to get rid of body lice, he suggests the use of a hot bath, followed by an inunction of sulfur ointment, or 25 per cent xylol in equal parts of lanolin and petroleum jelly. The disinfection of clothing, now carried out by steam, will probably be done by DDT in the future. For the head louse, the treatment recommended is to soak the scalp and hair thoroughly with methylated spirits 7 parts and water 3 parts. For young children, a hair crop and dilute ammoniated mercury ointment are all that is required. In the Services, 30 to 60 drops of a mixture of equal parts of liquid petrolatum and "Lethane 384 Special" is dropped through partings on the scalp and spread by massage. DDT (0.2 Gm.) completely "louse-proofs" the head for one week. In Learoyd's opinion, the simplest way of removing the crab louse is to shave off the affected hair and then apply the 25 per cent xylol ointment.

The well-known standard ways of treating scabies are with sulfur ointment and benzyl benzoate. For fleas, treatment will be with dimethyl phthalate, or with DDT. An anti-pruritic application containing 1 per cent phenol and 5 per cent menthol in calamine lotion mollifies the irritation of bug and flea bites. To protect against harvest bugs, a dust of 5 per cent sulfur in talcum powder is suggested for socks, and sulfur ointment for the legs. Dimethyl phthalate-treated socks are probably the best of all. The mites can be removed with gasoline or salt water, but severe sufferers from harvest bugs should carry a benzocaine preparation in a bottle with a glass rod stopper, the solution for this purpose consisting of 2 Gm. of benzocaine in 15 cc. of flexible collodion.

For gnats or mosquitoes, the best repellent is DDT in diesel oil, though dimethyl phthalate is excellent. Bee stings may cause death, so the sting should be removed. It should not be pulled out as more venom would be injected, but should be edged out with a knife and alkali applied (solution of ammonia or sodium bicarbonate). Wasp venom is alkaline and vinegar should be applied. Hornet stings have been treated by acids, alkalis and potassium permanganate.

Surgical Materials from Milk

Several reports have appeared recently on the value in surgery of absorbable materials like fibrin foam and oxidized cotton. Materials of this sort, used in place of cotton, have the advantage that a pledget made of absorbable substances need not be removed before closing the wound, thereby preventing the recurrence of bleeding which follows the removal of cotton. In considering various other substances for use in absorbable sponges, batting, thread and the like, it was suggested that casein fiber prepared from milk might be suitable. Such a fiber from cow's milk has been used commercially for years in textiles under the trade name "Aralac." The material is plentiful, inexpensive, chemically uniform and has the requisite physical properties for surgical use. It can be spun into threads, formed into battings and can be steam-sterilized repeatedly and stored indefinitely.

Preliminary experiments reported by E. B. Spitz, M. Ziff, C. Brenner and C. Davison (*Science* 102:621, 1945) indicate that casein fiber is readily absorbed after septic implantation in the brain, muscles and subcutaneous tissues of test animals. The absorbtion is accompanied by a mild cellular reaction similar to that caused by fibrin foam or oxidized cotton. Experiments are continuing with other forms of casein material, with particular emphasis on the possibility of antibody formation in the blood and tissues.

Pyruvic Acid in Deep Burn Therapy

According to a note in the January 1946 issue of *Modern Medicine*, G. J. Conner and his associates have found that the risk of serious infection and death from deep burns is minimized when pyruvic acid is applied as soon as the patient has recovered from shock. The pyruvic acid hastens separation of the slough, thus permitting skin grafting much earlier than would otherwise be possible. Excellent functional and

cosmetic results are reported. In the method used, a large amount of the acid, in the form of a wet paste, is applied to the burned area and this is covered with a sheet-like bag, which in turn is covered with oiled silk or cellophane to prevent the paste from drying. After two or three days the dressing is replaced with a fresh one. At the time of the third dressing, generally about ten days later, the slough is almost completely separated. Large burned areas are usually clean, free of dead tissue and ready for grafting within two weeks of injury. Less extensive burns are often ready for grafting within a week.

Absorptives and Thiamin Utilization

For some time, kaolin has been used in the treatment of diarrhea caused by such agents as gastroenterotoxic organisms or food poisons. Fuller's earth has also been used therapeutically for its adsorbent properties. However, it has been suggested that these adsorbents adsorb not only the undesirable agent for which they are prescribed but also vitamins of the B-complex. To determine the facts of the matter, D. Melnick, M. Hochberg and B. L. Osler (*J. Nutrition* 30:233, 1945) undertook a study of the effect of concomitantly ingested fuller's earth and kaolin on the availability of thiamin. Thiamin was used for test purposes since it is more readily adsorbed and more firmly retained by kaolin and fuller's earth than either niacin or riboflavin.

In vitro tests showed that thiamin was readily adsorbed from aqueous solution by both kaolin and fuller's earth. In vivo tests showed that when thiamin and fuller's earth were given concomitantly the availability of the thiamin was greatly reduced; on the other hand, kaolin did not interfere with the availability of the thiamin and even seemed to protect the latter. These experimental results suggest that precautions should be taken to assure sufficient vitamin intake when absorbing agents are administered.

Detoxifying Arsenicals with Vitamin C

The experimental studies reported by E. W. McChesney (*J. Pharmacol. & Exper. Therap.* 84:222, 1945) indicate that ascorbic acid may have a beneficial influence on the detoxication of arsphenamides. He found that ascorbic acid seems to be able to retard the oxidation of arsenicals; it is suggested that ascorbic acid administered with an arsenical prevents immediate oxidation of the arsenical by decreasing the oxidation-reduction potential of the blood. It is also suggested that detoxication occurs not in the liver and kidneys but in the blood stream. The experimental data showed that if given simultaneously, a suitable quantity of ascorbic acid will protect all animals from a dose of neoarsphenamine which, if given alone, would have killed about 60 per cent of the test animals. If the ascorbic acid was given 10 to 30 minutes before the administration of the arsenical, protection was obtained only by raising the ascorbic acid dosage level. If the vitamin was given 30 minutes after administration of the arsenical no protection was conferred even with large quantities of ascorbic acid.

Penicillin Plus Parachlorophenol for Mixed Infections

It has been shown frequently that penicillin is of questionable benefit or no benefit at all in the treatment of many infections in which there is a mixture of organisms. In some of these infections there is undoubtedly a synergistic action on the part of the bacteria in the production of the pathologic process. In other cases, secondary contaminants which are not pathogenic or are only feebly so, under ordinary circumstances, are able to multiply in the presence of wound exudate or dead tissue. Using the wound as a culture medium, these organisms produce metabolic products which may be toxic locally to the tissues of the wound or may be absorbed by the body and give rise to general symptoms. Certain of these metabolic products may also destroy the growth-inhibiting action of penicillin. Gram-negative organism are particularly guilty.

With these facts as a background, F. L. Meleny, B. A. Johnson, E. J. Pulaski and F. Colonna (*J.A.M.A.* 130:121, 1946) undertook a search for an antiseptic against the organisms which inhibited penicillin action. Any agent to be used as an adjunct in combination with penicillin would have to possess certain specific properties. It had to be active in the presence of organic matter and able to penetrate pus or wound discharges and the surrounding infected tissues. It had to be soluble in water; it had to prevent the growth of bacteria in a wound without retarding the healing of the wound and it had to be non-toxic in the amounts needed when used for local application to infected wounds.

Over two hundred substances were tested. Among the agents which seem to meet these conditions and therefore are worthy of extensive laboratory and clinical studies are p-chlorophenol, 9-aminoacridine hydrochloride, 5 nitro-2 furaldehyde semicarbazone, streptothricin and streptomycin. Of these, p-chlorophenol is the most effective antibacterial agent against gram-negative organisms. In a concentration consistent with clinical safe application, it was bacteriostatic and bactericidal for all the gram-negative organisms tested. However, all of these agents are compatible with penicillin and may be combined for local application to infected wounds. In addition, they may be incorporated in a suitable base for local application and prolonged action on wounds.

Penicillin Vaginal Suppository

To the growing list of preparations for obtaining the benefits of penicillin locally may be added the formula for vaginal gelatin suppositories of penicillin developed at the Massachusetts College of Pharmacy (*J.A.Ph.A.*, Pract. Pharm. Ed. 6:279, 1945), as follows:

Gelatin	**40.000 per cent**
Butyl parahydroxybenzoate (Butoben)	**0.025 " "**
Distilled water, to make	**100.000 " "**
Penicillin (sodium or calcium)	**the prescribed quantity**

Dissolve the penicillin in about 3 cc. of the distilled water. Add the butyl parahydroxybenzoate to the remainder of the distilled water, heat the mixture to boiling, pour it upon the gelatin, and stir until the mixture is of uniform consistency. When the mixture has cooled to a temperature of 50° C., add the solution of the penicillin, mix well, and pour the product into molds which have not been chilled. Allow to stand at room temperature until the suppositories have hardened. Remove the suppositories from the molds, dust them with talc, and place them in individual glass containers. *Store in a refrigerator* at a temperature not above 10° C.

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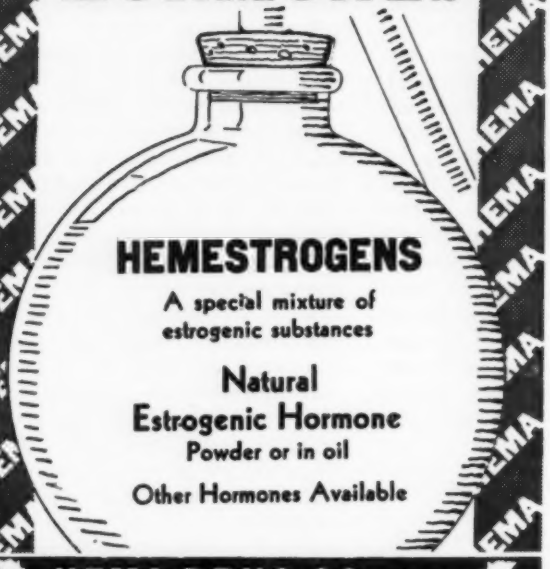

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Bourbon Vanilla Quota Expected To Be Short of U. S. Needs; Spot Market for Beans Tight, Prices Firm

A good demand prevailed for vanilla beans but spot stocks were conservative and much of the present local supplies were understood to be for the account of buyers on contract.

Arrangements concerning the new vanilla bean export quota out of Madagascar have not yet been completed by the French Colonial Government, and local suppliers not knowing the exact tonnage that will be made available for shipment to the United States are reported limiting offers to consumers here.

It is understood that the French Government is planning to establish a quota of about 250 tons covering a six months' period from July to December, 1946, but this tonnage will fall far short of our total requirements, it is believed. The cost of the beans to be exported in the last half of the year will be approximately $1 per kilo above the prices paid for beans against the old quota. There is a steamer afloat that should arrive here in the middle of March but the cargo will amount to only 25 tons.

The United States Department of Agriculture, reporting on the vanilla bean outlook for 1946 states: "The first vanilla beans from the 1945-46 Madagascar crop, forecast at 600,000 pounds, were expected to reach the United States by December 1945, but those from the corresponding Mexican crop will not be available in quantity until the Spring of 1946. Estimates of the Mexican crop vary from 175,000 to 350,000 pounds. No data for Reunion are available, but the crop doubtless will be much smaller than the prewar average of 110,000 pounds. The 1945 crop in French Oceania, harvested from May to September, is expected to reach 280,000 pounds. Output in the Seychelles, Mauritius, and the West Indies probably will be normal. No reports have been received concerning the condition of vanilla plantations in the Netherlands Indies. Total 1945-46 world production is expected to exceed the estimated production of 1,100,000 pounds in 1944-45 but to fall short of the 1935-39 average of 1,550,000 pounds."

"Although a below-average crop has been forecast for 1945-46, indications are that supplies of vanilla beans will be sufficient to permit United States consumption during 1946 at the prewar level. United States imports may exceed the 1935-39 annual average of 1,000,000 pounds, but European imports for consumption doubtless will be substantially less than in prewar years."

FEBRUARY PRICE CHANGES

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Cassia Oil Redist. 50c
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Ergot oil 10c
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Kamala 8c
Lemon grass oil 20c
Oleoresin capsicum $1.25
Peppermint oil Nat. 10c
Redist. 25c
Rhubarb root HD 17c
Sabadilla seed 5c
Saffron Valencia $6
Sandalwood Oil Mysore $2.50
Soap bark crushed 16c
cut 14c

DOWN

Anise oil 50c
Arabic gum sorts ½c
Citronella oil Ceylon 5c
Ginger oil $1
Heliotropin 20c
Lime oil dist. 25c
Mandarin oil 75c
Menthol Nat. 5c
Mercury $3

• Prices quoted in this section were current on the first of this month.

Spice Ceilings

The spice trade advisory board recommendation that spices be freed from controls and ceilings be lifted has been endorsed by the American Spice Trade Association and the endorsement forwarded to the OPA administration. The action was taken to relieve American merchants from the frustrations caused by the fact that prices in foreign markets in most instances make it impossible for importers to sell at any profit because values at the source are higher than OPA ceilings. Other world markets are free from the restrictions imposed by OPA controls and hence they hold a substantial advantage over merchants in this country.

Gums Spotty

Among the gums there is virtually no Cape aloes available in this market. Prices on Curacao are lower at 45c to 47c a pound, but the quotations are still well above what might be considered a normal level. There is a sufficient supply of tragacanth to meet current demands and new crop goods should be available early in May. Spot prices on gum arabic are working higher despite the recent arrival of several hundred tons and a reasonably good spot supply. Current range of prices prevailing on amber sorts is reported close to replacement values and advices from the Sudan indicate a further strengthening in the market. Trade here has been more active with a reasonably good tonnage having changed hands on spot and for later delivery.

Miscellaneous

Buckthorn bark is scarce on spot. Little or no digitalis, belladonna, or other drugs have come out of Europe as yet. Kamala, ergot, kola nuts and soap bark registered advances during the period. There is a reasonably good supply of average quality juniper berries available for immediate delivery. Spanish saffron went to $41 a pound. Powdered papain was advanced to $4.25 to $4.50 a pound. Prospects for adequate supply of ipecac were reported poor. Stocks of Belgian valerian root have disappeared. Indian root became more valuable.

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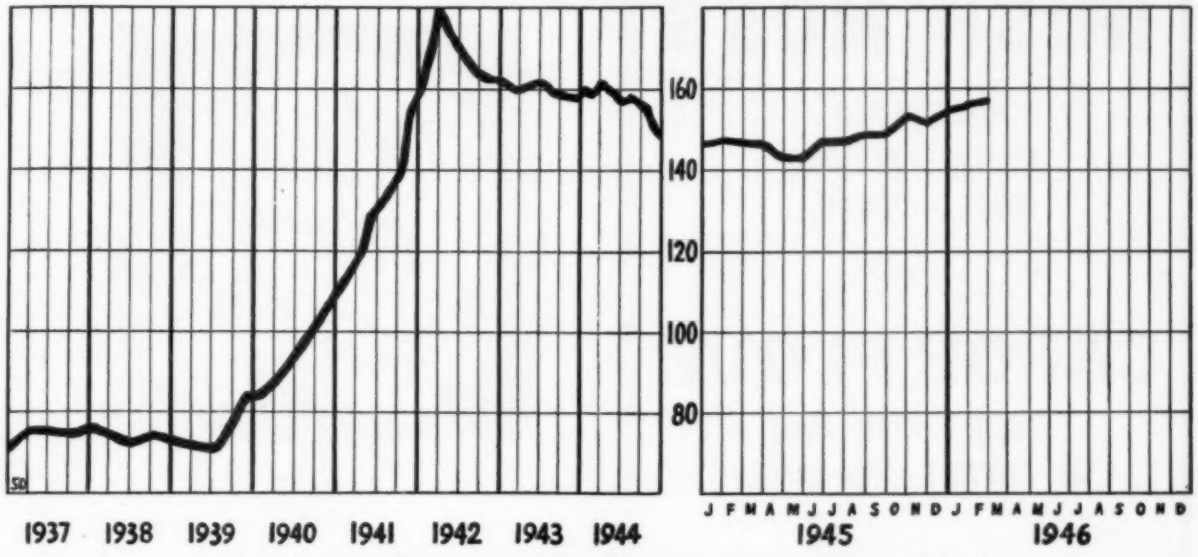
50 Raw Materials—Weighted Price Index. 1926=100.



The price index of fifty commodities for February advanced from 156.5 to 157.5.

Spot Lemongrass Oil Prices Advance on Unfavorable Replacement Prospects; Citronella Ceylon Eases

Spot prices for lemongrass oil were advanced to the basis of from $2.95 to $3.85 per pound. This movement took place in spite of the fact that shipments have been arriving from India. It was said this material was going directly into consuming channels to satisfy the backlog of orders over a period of several weeks. The outlook was not too secure for future replacements, and the costs have shown a steady upward tendency.

The west coast of the Madras Presidency, the mountain slopes of Malabar, and the foothills of Travancore in southern India are among the world's chief sources of lemongrass for the production of oil. During the season July 1944 to January 1945, the area under lemongrass in southern India was estimated at about 25,000 acres. An increase in acreage is expected as a result of the anticipated rise in prices of the oil, now that hostilities have ceased. The estimated yield of lemongrass oil from July 1944 to January 1945 was 400 tons, twice the output in the preceding season.

Prices of lemongrass oil in Cochin during the year ended January 1945 were $26.40, highest quotation, and $16.95, the lowest for 12 bottles of 22 ounces each, delivered at coastal warehouses. Quotations for the year ended January 1943 ranged from $6.45 to $17.10 for the above amounts of the oil.

Cananga Scarce

The reestablishment of trade with the Dutch East Indies was looked for to relieve the serious spot shortage in cananga oil. The market is practically nominal in the absence of sufficient supplies to establish a quotable basis. Since there is no substitute for this oil it is likely that when shipments finally reach this market they will go immediately into consuming channels.

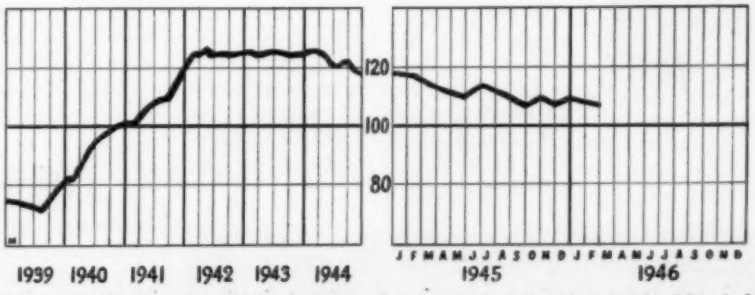
Citronella Down

That citronella oil diluted or adulterated by the addition of a quantity of petroleum distillate has not lost its identity for tariff purposes and therefore may be imported free of duty, was decided by the United States Customs Court in a recent decision. While the trade reacted favorably to the custom court's decision on Ceylon citronella oil, indications were that the government would appeal the decision. If so, it was reported, the status of citronella would not be made clear for some time. Trading in the market had been retarded many weeks pending the decision, and some consumers desiring material made purchases on a cost plus duty basis. However, the customs decision affected the market to the extent that a moderate decline set in which placed the range of prices at from $1.65 to $1.75 per pound.

Peppermint Oil, Argentina

Argentina is producing two varieties of mint: Menta Mitcham (Mentha piperita) and Menta Japonesa (Mentha arvensia, variety Piperascens). The 1945 acreage planted to mint is 556 hectares, of which 531 hectares are located in the Province of Mendoza, according to official reports.

15 Medicinal Chemicals—Weighted Price Index. 1926=100.



The medicinal chemicals index declined fractionally from 129.5 to 129.3. Menthol dropped to $4.40; mercury was down to $102.

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Although production of peppermint oil in 1945 is expected to reach 8,340 kilograms, Argentina imports sizable quantities. In 1944, such imports totaled 7,687 kilograms, and in 1943, 9,919 kilograms.

While a number of small farmers had been experimenting with the cultivation of mint, it was only after the creation of the Direccion de Cultives Especiales under the Argentine Ministry of Agriculture that this plant was given serious consideration for production on a commercial scale. The mint is grown by numerous small farmers, some of whom pool their harvests for the extraction of the essential oil in cooperative stills.

More Bergamot

Reports were current to the effect that a new lot of bergamot oil is about to arrive from Italy via United States government circles. The government price is expected to be somewhat higher than was set on the last lot. In the meantime satisfactory spot stocks prevailed from previous shipments and the market price was steady at a range of from $4.50 to $5.

China Oils

It is now authoritatively reported that oils from China are definitely on the way. Oil of anise is reported at a price range of from $3.50 to $4. Oil of cassia is quoted on spot at from $11 to $12. While these prices are high they are not considered out of line with the general trend of essential oil quotations.

It is also expected in the trade that the cassia oil on the way here will be of exceptionally fine quality. In the past cinnamic aldehyde has been used to cut this oil but as the Chinese do not now possess any of this material the purest cassia oil to be offered here in many years is in prospect.

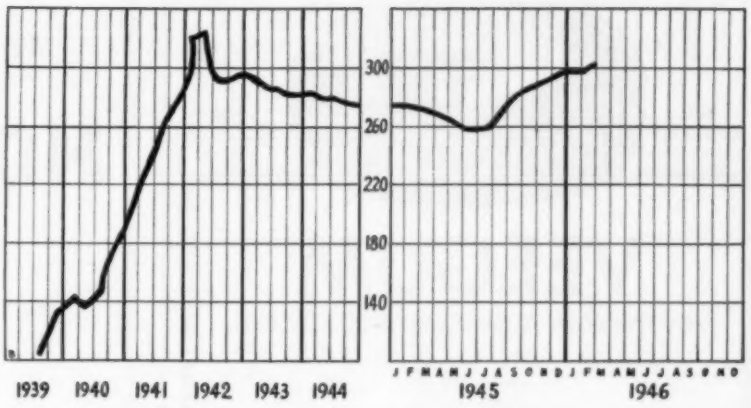
Sandalwood Up

The OPA ceiling price for Mysore sandalwood oil was lifted to the basis of $9.52 per pound in 25 pound tin containers. Spot offerings were negligible at the moment, although it was indicated that material was afloat, and expected to reach here shortly. The higher replacement costs and shipping difficulties were factors in retarding business.

Lemon Stocks Up

Domestic production of lemon oil was expected to expand in view of the larger lemon crop. However, labor difficulties have been a detrimental factor. Government buying has leveled off, while the surplus stocks amounting to 300,000 pounds have been released on an allocated basis. The Department of Agriculture reported government acquisitions at the end of 1945 totaled 882,000 pounds.

15 Botanicals—Weighted Price Index. 1926=100.



The botanicals index advanced from 290.2 to 293.6. Balsam Tolu rose to $2.05; belladonna was up to $1.25; ergot advanced to $1.70; rhubarb jumped to 60 cents.

Miscellaneous

Steadily rising prices for oil lemongrass has strengthened the market for citral. Recent small arrivals of Bois de rose oil failed. Additional quantities of French lavender oil are believed nearby. Among the aromatic chemicals, most of the benzol and phenol derivatives show signs of strengthening. Fair quantities of almond oil, ginger and caraway are available in this market. Spot supply of expressed lime oil is small and prices on both the West Indian and Mexican varieties of distilled oil are firmly maintained under the influence of a reasonably good demand.

FINE CHEMICALS

Penicillin Exports Curbed

All outstanding individual licenses for the exportation of penicillin which had been validated prior to December 1, 1945, were revoked effective February 25, it was announced by the Office of International Trade of the Department of Commerce.

The action is being taken, it was explained, because of the shortage of the drug and to make possible a more equitable distribution both here and abroad. There was no estimate of the amount of penicillin involved in the licenses being revoked, but it was said, that applications had been made for permission to export "some rather sizable amounts."

Although the United States is producing an estimated 800 billion units of penicillin each month, there is not enough to meet the demand. Penicillin production is now four times as great as during the war, but due to heavy exports and to wider variety of dosage forms, the supply continues very scarce.

Soap Fats Tight

Supplies of soap fats from domestic production and stocks probably will be somewhat smaller this year than last, according to the Bureau of Agricultural Economics. With hog slaughter increased, grease production will be moderately larger than in 1945, but probably not enough larger to offset the reduction in January 1 stocks of tallow and greases, and in stocks of lard held by soapmakers, BAE said.

Mercury Production

Total production of mercury in 1945 was 30,600 flasks, according to the Bureau of Mines. Imports during the year totaled 71,598 flasks and exports were but 1,037 flasks. Consumption was 63,900 flasks. Stocks at the end of December were: Metal Reserve, 63,638 flasks; consumers and dealers, 17,000 flasks; producers, 3,243 flasks. Sources of imported metal were: Canada, 1,720 flasks; Chile, 750 flasks; Honduras, 23 flasks; Mexico, 13,083 flasks; Peru, 185 flasks, and Spain, 55,747 flasks.

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Menthol Spotty

The market for Brazilian menthol showed a tendency to fluctuate considerably during the period under review. After several price advances the spot market finally settled down to a basis of from $4.40 to $4.50 a pound. The earlier price advances were probably wiped out by the lack of consumer demand.

A report received from Shanghai stated that the price of menthol there remains firm at $5 per pound c.i.f., but as soon as the exchange is fixed it will be possible to compete with shippers in Brazil especially since production is expected to get under way momentarily. There is said to be 100 tons of menthol available in China.

Alcohol Production

The Alcohol Tax Unit of the Bureau of Internal Revenue released comparative statistics on pure and denatured ethyl alcohol for the month of December. Louisiana was the State producing the largest individual quantity of ethyl alcohol, but West Virginia ran that State a close second. Indiana was third in the total produced. In completely denatured alcohol, Pennsylvania led other producing states by a wide margin. Indiana was second. In specially denatured alcohol, West Virginia was the largest producer, followed by Louisiana and New Jersey, respectively. Comparative data follows:

Alcohol Data: Dec.

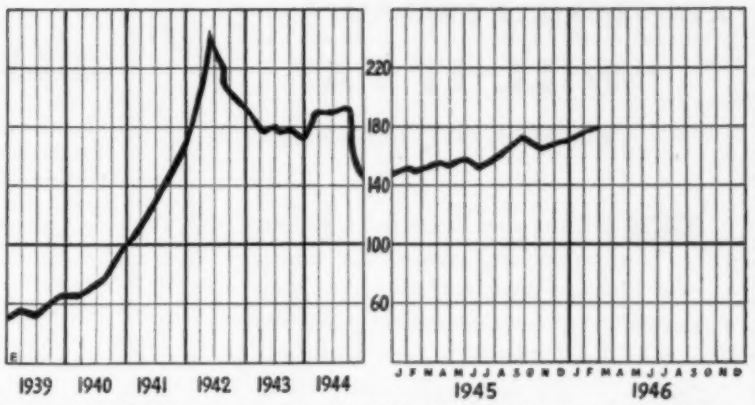
	Proof Gallons 1945	1944
Production—		
Ethyl	23,782,300	37,053,763
Completely denatured	1,475,257	676,433
Specially denatured	10,873,464	35,054,371
	Wine gallons 1945	1944
Withdrawals—		
Ethyl, tax paid	7,297,979	7,308,578
tax free	45,520,342	88,869,703
Completely denatured	1,475,120	724,096
Specially denatured	11,277,955	35,658,665
Stocks—		
Ethyl	111,493,143	126,619,616
Completely denatured	47,943	82,342
Specially denatured	18,348,226	20,190,280

Glycerin Tight

Reports indicate that the soap making industry is working with a cut of 78 per cent of the fats and oils used in the base period. Informed quarters do not expect a favorable change in the quota figure because of the world shortage of fats and oils. United States needs will be held down to a bare minimum, in all probability, until foreign needs ease.

The prediction that there would be little change in soap supplies this year is based on the probability that, while there will be less soap fats available, producers will make up for lowered output from meager stocks on hand. All of which means that the glycerin refiners cannot hope for a material improvement in the amount of crude glycerin available for refining purposes. It is highly significant that the period under review witnessed the arrival of crude glycerin not only from England but as far away as Australia.

15 Essential Oils—Weighted Price Index. 1926=100.



The essential oils index advanced from 165.7 to 166.8. Anise was off to $3.50; bergamot advanced to $8.75; Cassia jumped to $11; Citronella Ceylon declined to $1.65; clove oil was up to $$1.65; peppermint was higher at $6.25; sandalwood Mysore rose to $9.50.

Strychnine Up

New and higher prices have been announced on major strychnine salts, namely alkaloid and sulfate in powdered form. The new quotation on powdered sulfate is now $1 an ounce, and alkaloid $1.25 for bulk quantities of 100 ounces or more. New prices on granular and crystal forms have not yet been announced.

The rise in quotations, it is explained, represents steadily increasing costs of the basis material from which these salts are made. Use of strychnine salts in the manufacture of tonics should be increasing shortly and substantial quantities are used over the spring months for rodent control especially in the Middle West. The alkaloid is reported coming through in larger volume and will be more freely available than heretofore while greater quantities of the sulfate are expected to be available within the next few weeks. Up to this time demand for these major items has been running well in excess of the available supply.

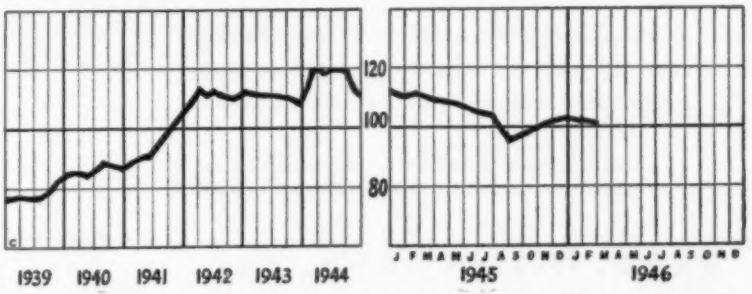
Agar Uncertain

Government officials in the Department of the Interior said that U. S. production of agar is sufficient to care for home needs. The Department, however, would venture no opinion as to the ability of the Japanese soon to return to the world markets with competitive offerings. Since production costs in Japan will be far lower than in this country, continuation of domestic production born of wartime needs is at least uncertain.

Foreign Talc

Encouraging reports continue to be heard in the trade relative to the prospects of again receiving talc from abroad.

25 Cosmetic Raw Materials—Unweighted Price Index. 1926=100.



The cosmetic raw materials index declined fractionally from 102.8 to 102.3. Balsam Tolu was higher at $2.05; menthol declined to $4.40; quince seed was offered at $1.50; spermaceti dropped to 27 cents; tragacanth was down to $3.50.

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READERS' QUESTIONS

SCALP LOTION: I have in mind to make a preparation for the hair containing pilocarpine hydrochloride, tincture of cantharides, tincture of capsicum, castor oil and alcohol. I hope you can help me by giving the quantity of each ingredient. Boston.

I think a product along the following lines will answer your purpose:

Castor oil	**1.0**
Pilocarpine hydrochloride.	**2.0**
Tincture of cantharides	**2.0**
Tincture of capsicum	**2.0**
Alcohol, 85 per cent to make	**100.0**

TRAGACANTH PROBLEM: As readers of your magazine we are writing to ask you for information concerning tragacanth. We are having trouble in making a suitable solution with the requisite viscosity. At present we are using 50 grams of the gum to 6 quarts of water. What can be done to improve this product? Kalamazoo.

Not knowing what is used in conjunction with the tragacanth, my first impression is that you use too small a proportion of tragacanth to provide any real viscosity. Increasing the proportion of gum and using a higher grade, ribbon type of product (rather than powdered tragacanth) may be helpful. It is often recommended that the tragacanth solution be heated to 190 to 200°F. for a short time; permitting the mixture to stand overnight to obtain a better mucilage.

FACIAL PACKS: Will you please suggest a formula for a mud and lemon facial pack? Thank you. Long Island City.

A typical mud pack such as you request may consist of:

Fuller's earth or another suitable earth or clay—100 parts

Lemon juice—20 parts

These materials are rubbed in a mortar with a pestle so as to form a smooth paste; sufficient water being added, if necessary, to ensure the desired consistency. The mixture may be perfumed if desired.

A more standard and more up-to-date facial pack containing citric acid instead of lemon juice may be made as follows:

Kaolin or other prepared earth	**100 parts**
Ground alum	**10 "**
Hydrogen peroxide	**10 "**
Epsom salt	**15 "**
Citric acid	**10 "**
Glycerine	**15 "**
Water	**50 "**

All the ingredients, except the "earth", are dissolved in the water, and the "earth" is then added and mixed thoroughly so as to produce a smooth paste. If necessary, a rather larger proportion of water may be added, and any desired perfume may be included.

ELIXIR OF FERROUS SULFATE: Would you be good enough to give us a working formula for an Elixir of Ferrous Sulfate? Baltimore.

A preparation of this type, Clark's Elixir of Ferrous Sulfate, is given in the "Pharmaceutical Recipe Book" as follows:

Ferrous sulfate, granular	**46 Gm.**
Citric acid	**2 Gm.**
Spirit of peppermint	**2 cc.**
Syrup, a sufficient quantity, to make	**1000 cc.**

Powder the citric acid in a mortar, add the ferrous sulfate and a small amount of syrup and triturate vigorously until the powders are in a very fine state of subdivision. Pour into a suitable bottle, rinse out the mortar with portions of syrup and add these rinsings to the material in the bottle. Add the spirit of peppermint and enough syrup to make 1000 cc. and shake well. When the salt is dissolved, strain through 2 or 3 thicknesses of gauze. This syrup should be freshly prepared. The average dose is 4 cc. or 1 fluidrachm.

MOLD PREVENTION: I would like to know what causes mold to form on the top of vanishing cream after it has been kept in a jar for some time, and what you would recommend to stop it. I might point out that the mold seems to start where the cream touches the paper lining of the cap, and am wondering if the lacquer or whatever is used on the inside of this cap is responsible for the starting of this mold. New Rochelle.

It is quite possible that mold formation is initiated by contact with the liner of your closure and we would advise that you do not fill your cream to the brim. However, we do feel that failure to include a suitable preservative is also responsible for mold formation. We would suggest that you include in your formula about 0.15% of a preservative such as methyl parahydroxybenzoate.

WALNUT SKIN STAIN: Can you give me a formula for extracting walnut hulls to make a stain for the skin? Buffalo.

According to Goodman's text a walnut skin stain can be made from:

Green walnut hulls	**70.0**
Alum	**5.0**
Water, enough to make	**100.0**
Alcohol	**32.0**

Triturate the first three ingredients in mortar. Add the alcohol and let stand for four days. Filter.

Perhaps an even simpler procedure is the following:

Fresh green walnut hulls	**24.0**
Ammonia water	**24.0**
Water, enough to make	**100.0**

Triturate in mortar; evaporate to syrupy consistency. It is stressed that the shell of the walnut is useless; the color principle residing in the hull. The intensity of the color can be modified by dilution.

Purified —

Calcium Magnesium Phytate

(Ca-Mg Salt of inosithexaphosphoric acid)

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Acetarsone
Acid Nucleic
Acid p-Aminobenzoic
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Carbarsone
Chiniofon
Chloro-Iodo-Oxyquinoline
Desoxyephedrine HCl
Diethylstilbestrol
Diphenylhydantoin
Mannitol
Menadione
Nikethamide
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Phenobarbital
Pentobarbital Sodium
Phenylsemicarbazide
Resorcinol
Saponin
Theophylline

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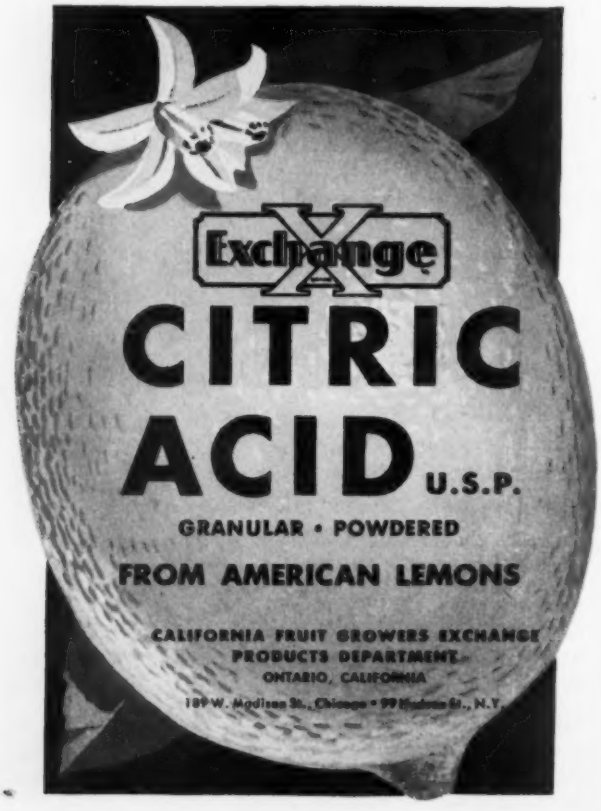

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Development of Pharmaceutical Specialties

(*Continued from page 342*)

profession is costly, time-consuming and in most instances unnecessary. Planned selling integrated with a cooperative production head and backed up by clear-headed management is the answer to "Too bad, we're short," on new pharmaceutical specialties.

As we all know the distribution chain involves the retailer, wholesaler, chain and selected department stores. There is no shortcut to getting a new specialty in any of these trade classifications. Boiled down to its simplest terms the channels of distribution are interested in converting a pharmaceutical specialty into dollars at a profit. If it is stocked, detailed, sampled and advertised, and if physicians find it therapeutically effective, the product will move, the various trade classifications will reorder, and the sales curve will tell its graphic story. The final result is dependent on physician acceptance plus frequent, effective detailing. It can not be emphasized too much or too often that detailing is the key to new product success.

Hospitals: The hospital might rightly be called a trade class in the channel of distribution. There are, however, reasons why in discussing new specialties that we consider the hospital in a separate category.

Hospitals are divided into government, state, county and local groupings. Government and state hospitals usually purchase on a bid basis so that in most cases sales problems are intermingled with other factors quite apart from creating a demand for a new product through detailing. For all practical purposes, the county and local hospitals (private and city) offer the best prospects for acceptance of a new pharmaceutical specialty. In some city and county hospitals, certain products are bought on bid, but in the case of a specialty there is not too much resistance if the staff physicians specify it by name.

If success is going to be realized, representatives must know how to work hospitals. Many men are weak in their knowledge of how to make their hospital calls effective. Those who have learned the right approach reap the reward.

Experience has shown that the pharmacist is an excellent starting point for introducing a new specialty into a hospital. He is usually well informed, so that an on-the-toes representative can save himself much time by learning what hospital staff members would be interested in the new product. If the proper physicians have been detailed and they have shown real interest, then stock packages should be placed in the hospital pharmacy for use on request. If the new product is available in the pharmacy when needed, and if the therapeutic results are satisfactory, it won't be long before it is being stocked and used regularly. This procedure pleases the physician and breaks down the resistance of the hospital buyer who is usually quite reticent to add new items unless there is a demand for them.

It is also well to point out that some medical representatives lose part of their effectiveness by not "following through" in their hospital work. Overlooking the resident physicians, house officers and internes is showing a lack of vision. It is important to remember that the interne of today may be the chief-of-staff tomorrow. The pathologist is often neglected, too. He is extremely influential in some hospitals. Nurses, laboratory technicians, the dietitian, the out-patient department and the various clinics should all be carefully considered in introducing a new specialty.

The hospital, effectively worked, can be of tremendous value in getting a new product off to a head start. It is usually well worth the time invested.

Samples: The pharmaceutical industry has at times been criticized for its generous use of samples. While it is agreed that there is some wastage and "peddling", the fact remains that physicians like to try out a new product on a small scale before writing prescriptions for it. As a result, samples are used quite extensively in introducing new specialties.

There has been much discussion regarding how much of a sample to include in a single unit. A good rule-of-thumb is to have enough so that the patient gets a therapeutic response. If a product (vitamins, for example) is of such a nature that it does not give a short term response then it would probably be desirable to provide enough for a two days to a week trial, depending on the dosage. Those who have had the most experience believe, and we concur, that the skillful use of samples carefully followed up is a most important sales aid in putting across a new pharmaceutical specialty.

The Detail Man: A pharmaceutical company's most direct contact with the medical profession is through the detail man, or as some prefer to call him the professional service representative. However, no matter what term is used the fact remains that these men have unusual influence with the doctor. Besides giving him up-to-date product details, the representative is also "a pollenizer of medical information."

It is not surprising that some feel that pharmaceutical representatives are becoming real factors in post-graduate medical education. When we stop and consider that the pharmaceutical industry spends over $15 million a year in research it is not hard to believe that many physicians look to the professional service representatives to keep them up to date on "What's new."

Much has been written on how to detail effectively. It is not therefore our purpose to duplicate the work of others. If more information is desired on detailing there are papers and texts on the subject. There are some points, however, in connection with the introduction of new pharmaceutical specialties which we feel certain are important enough to bring out here.

(*Continued on page 443*)

Advertising Advertising

(*Continued from page 345*)

advertisements from BEAUTY FASHION. They were asked to note carefully the consumer magazines, the product and the manufacturer.

Each knew a test was being made. This was not a casual reading in their own office. After turning the pages of the magazine in a casual reading, and a half hour of general conversation, each buyer was asked to write a list of media for each of these advertisers. (We had to help four buyers remember a third advertiser).

No one listed all the names correctly. Nearly half were sadly mixed up, several added magazines not used by any, many forgot at least one magazine. Adding all their answers, in a effort to reach their own subconscious appraisal of the relative advertising of each company we found.

	Actual Circulation	*Circulation of combined list by Buyers*
Company A	8.4 Million	6.1 Million
" B	6.8 "	7.2 "
" C	1.9 "	4.3 "

Had there been more mass media listed here, particularly more of the movie group type, the variation would in some cases surely have been weird beyond words. Consider the recent Revlon trade advertisement on Fatal Apple. This was a spread in four colors, using the same plates or electros used in "Life" magazine.

In this advertisement, Revlon established in the trade mind the following impressions:

1. In their advertising this year they were using spreads in full color, beautiful, effective advertisements.
2. Among other magazines they had a schedule in "life."
3. This particular product and its promotion meant action—action because of big effective space which retailers could see for themselves; action because they quickly grasp and visualize the one big magazine at this particular moment.

Department store buyers are closely associated with manufacturers' advertising, both local and national. Most of them are prone to favor certain magazines based on a long chain of association in their minds with successful promotions in which these magazines participated. This is particularly true of buyers and salesgirls in the larger fashion stores. These preferences may bear little relation to actual circulation, even in their own community. But these preferences do exert strong influences on buyer and salesgirl cooperation in product promotion. The reproduction of consumer advertisements, when they are not limited in space or in scope by a list of media, tend to build up in the mind of the buyer and salesgirls an accumulative impression. It is common to find them insisting that the advertising appears in many magazines, that they have seen it in the preferred magazines.

This association in their mind of a succession of con-

sumer pages, which they know they have seen, combined with their own strong preferences, often convince them beyond argument. Salesmen quite often find a buyer convinced and ready to argue that he has seen advertising by the company in a magazine the salesman knows quite well is not being used. The consumer advertising which buyers and salesgirls believe in and are apt to remember is the advertisement which they see for themselves in a magazine. All the statistics, broadsides, conversation in the world cannot equal, in mental conviction, this fleeting impression acquired in office or home.

It would seem, therefore, that the retail trade magazine should first of all be used to display the actual consumer advertising, as it appears without any limiting factors. Next that these pages should appear consistently, not only to build up in the retail mind an impression of consistent advertising effort, but also to broaden the impression of its scope. And it would certainly seem, above every other consideration, that the consumer advertising so displayed would exhibit to the retail trade the pick and the best in consumer advertising.

Diabetic Specialties

(Continued from page 348)

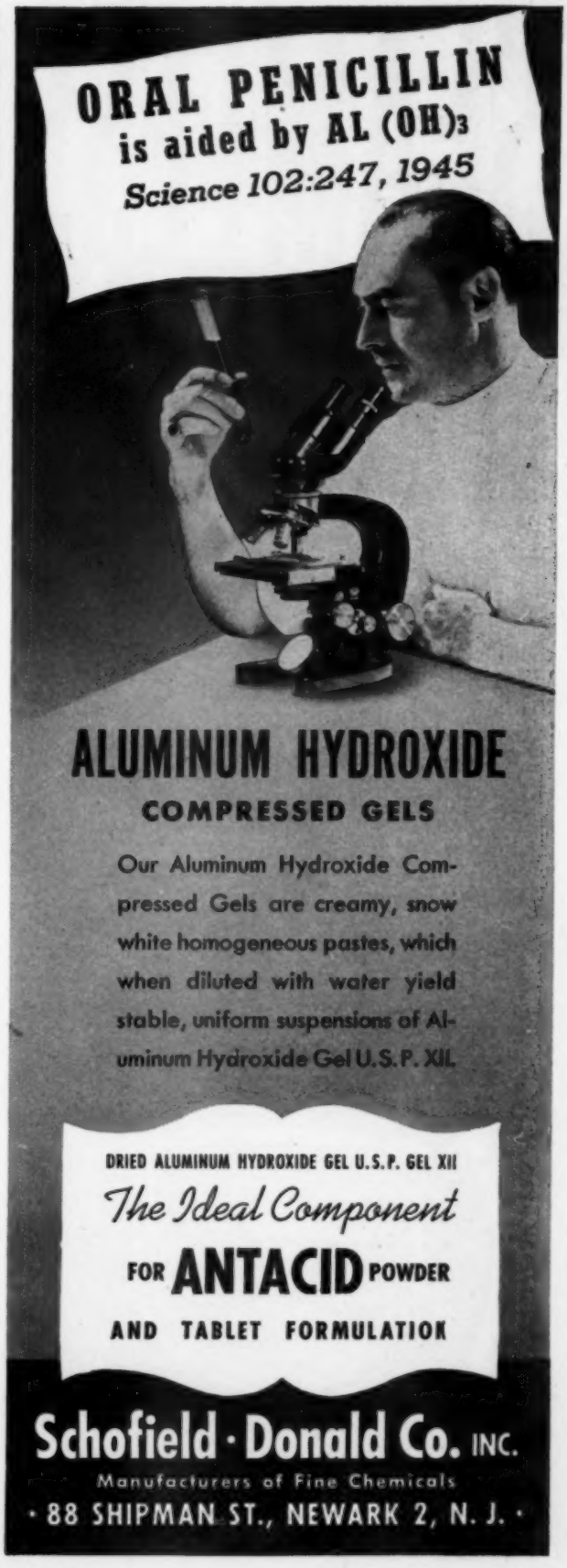
Codeine phosphate	**1.1 Gm.**
Ammonium chloride	**35.0 Gm.**
Glycerine	**375.0 cc.**
Solution of amaranth	**3.0 cc.**
Wintergreen water to make	**1 000.0 cc.**

When the need arises for administering a sedative to diabetic children or other diabetics who cannot swallow pills or capsules, the following liquid preparation[23, 26] a diabetic elixir of three bromides, may be used in an average adult dose of 4 cc.:

Ammonium bromide	**80.0 Gm.**
Potassium bromide	**80.0 Gm.**
Sodium bromide	**80.0 Gm.**
Glycerine	**200.0 cc.**
Solution of amaranth	**3.0 cc.**
Cinnamon water to make	**1 000.0 cc.**

Other, but not equally pleasant sedative preparations for diabetics are given in Dauer's[28] text which has been approved and adopted by New York City's Department of hospitals. A number of other special preparations for diabetic patients is also listed in this valuable source. However, it is apparent that with many liquid products suggested the problem of palatability has not been overcome entirely.

Infection in diabetics is always serious because dangerous consequences often follow even a minor injury or abrasion. Because of the greatly lowered tissue resistance inherent in the diabetic patient,[29] the skin is particularly vulnerable to infection.[30] Keeping the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skin "exquisitely clean" therefore becomes a most important factor in preventing infections like furunculosis (boils). Similar to boils, but far more serious because they make the diabetes much worse, carbuncles require treatment by a surgeon. Any tendency to boils requires great care on the part of the diabetic, so as to avoid breaking pustules and spreading the infection. Joslin[31] cites the advantages of using a boric acid-medicated alcohol solution and he recommends that individual boils be treated with an ointment originally recommended by Bowen:[32]

Boric acid	4.0
Precipitated sulfur	4.0
Carbolated petrolatum	30.0

Joslin also stresses that overtreatment must be avoided. Only the simplest lotions should be employed.

No matter how insignificant it may seem, proper and prompt treatment of any skin abrasion is of paramount importance to the diabetic. It is essential, however, that strong antiseptics, including iodine, be avoided, because such agents may cause further damage. Medicated alcohol and solution of hexylresorcinol are mentioned[31] as being suitable for use in treating the diabetic's skin injuries.

Scrupulous care of the feet is one of the most important elements in training the diabetic to live with his disease. One of the most feared of diabetic complications, gangrene may develop from the slightest bruise or abrasion of the skin. Since gangrene in diabetics usually begins in the toes,[33] care of the feet and attention to even the most minor injury looms as an essential part of personal attention. It has been shown that proper foot care can greatly minimize the frequency of this condition.[34] Nonetheless Joslin has warned that unless there is improvement in the prevention and treatment of gangrene, nearly 33,000 of the 700,000 diabetics now living in this country are destined to die from this complication.

The best treatment for gangrene, therefore, is to avoid it by daily cleanliness and scrupulous protection of the feet from injury, no matter how trivial. Because gangrene becomes more frequent the longer the diabetic lives, the habits of foot care and foot cleanliness must be ingrained as soon as the condition is discovered. As has been remarked by one leading authority,[31] "With patients over fifty years of age it is usually more important to look at their feet than their faces." The increasing life expectancy of the diabetic puts added emphasis on this suggestion.

Gangrene frequently occurs as a result of self-treatment of corns and calluses on the feet or from the use of strong antiseptics. Such conditions may be avoided by massaging the feet, after the daily cleansing, with lanolin, giving particular attention to the soles of the feet where there are calluses, and to the heels. By such means the calluses are softened and will eventually rub off.[34] Conway[35] likewise mentions that inunction of the

skin with hydrous wool fat, cottonseed oil or theobroma oil are of value in softening the skin and preventing the shiny tight surface which promotes abrasions.

When injury occurs various mild antiseptics may be employed to prevent infection and special preparations are useful to promote healing. Cod liver oil ointment is often serviceable for treating diabetic lesions[19] and it is believed to be effective because of the ability of the oil to stimulate epithelization or growth of new tissue.[38] Steklosa[19] reports that zinc peroxide in suspension and in ointment form has found use in the treatment of diabetic foot conditions. The suspension is made by dispersing the powder in sterile distilled water. The ointment which has been used is made from:

Zinc peroxide	**20.0**
Liquid petrolatum	**20.0**
Balsam of Peru	**5.0**
Petrolatum	**30.0**

Another application for aiding the healing of diabetic ulcers and wounds is described[23] as consisting of:

Urea	**120.0 Gm.**
Pectin paste	**440.0 Gm.**
Sulfonated and hydrogenated castor oil	**440.0 Gm.**

Any skin eruption that causes itching may become infected if it is further irritated by rubbing or scratching. This secondary infection, something to be avoided under any circumstances, is especially dangerous to the diabetic. Epidermophytosis or "athlete's foot," is particularly guilty in this respect. The diabetic cannot afford to neglect this very common condition, nor can he afford to experiment with preparations other than those known to be effective and safe for him. Hence simplicity and efficacy are the keynotes of all such products used by the diabetic.

In addition to his regular foot hygiene, the diabetic may employ a prophylactic dusting powder on the feet and in the shoes as an added means of preventing athlete's foot. A standard, well-recommended[19,31] powder of this sort may be made from:

Salicylic acid	**2.0**
Benzoic acid	**2.0**
Talc	**100.0**

A simple modification of this dusting powder is given[23] as containing:

Salicylic acid	**10.0 Gm.**
Benzoic acid	**10.0 Gm.**
Purified talc	**980.0 Gm.**

When epidermophytosis occurs in the diabetic, treatment is conservative. For mild cases, a 10 per cent aqueous solution of mercurochrome may be used. In more severe instances, a powder like one of the above, and a special ointment may be applied. One extensively used ointment[19,23,31] is a simple mixture of:

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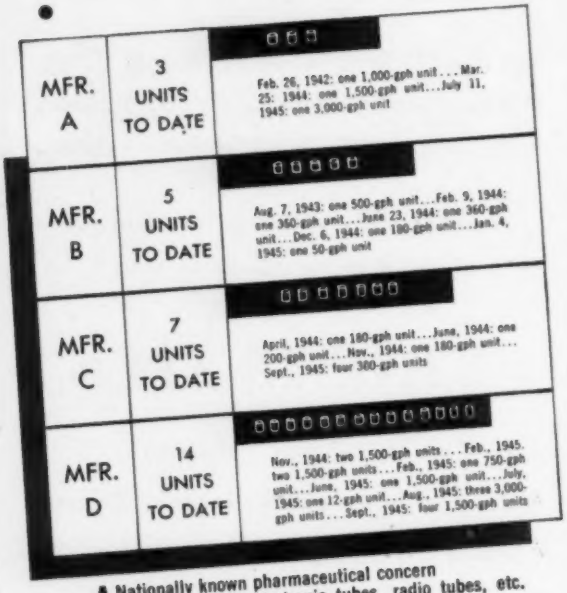
MFR. A
3 UNITS TO DATE
Feb. 26, 1942: one 1,000-gph unit... Mar. 25: 1944: one 1,500-gph unit... July 11, 1945: one 3,000-gph unit
MFR. B
5 UNITS TO DATE
Aug. 7, 1943: one 500-gph unit... Feb. 9, 1944: one 360-gph unit... June 23, 1944: one 360-gph unit... Dec. 6, 1944: one 180-gph unit... Jan. 4, 1945: one 50-gph unit
MFR. C
7 UNITS TO DATE
April, 1944: one 180-gph unit... June, 1944: one 200-gph unit... Nov., 1944: one 180-gph unit... Sept., 1945: four 360-gph units
MFR. D
14 UNITS TO DATE
Nov., 1944: two 1,500-gph units... Feb., 1945. two 1,500-gph units... Feb., 1945: one 750-gph unit... June, 1945: one 1,500-gph unit... July, 1945: one 12-gph unit... Aug., 1945: three 3,000-gph units... Sept., 1945: four 1,500-gph units

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Precipitated sulfur	**2.0**
Petrolatum	**30.0**

The itching eruptions of poison present a similar hazard of infection. For diabetics with such eruptions, Joslin recommends the use of a "white wash "made from:

Phenol	**0.65**
Zinc oxide	**8.00**
Calamine	**8.00**
Lime water to make	**250.00**

Burow's solution diluted 1 to 20 with water is also useful. It is stressed that no ointments or greasy substances may be used until the eruptions are completely dry. After this zinc ointment or cold cream may be used if necessary.

There are other preparations that may be developed to meet the specific needs of the many diabetics in this country. With dependable and safe products available for their special use, these appreciative people form a very important segment of the pharmaceutical-purchasing public.

BIBLIOGRAPHY

1. Anon.: "Diabetes," New York, Metrop. Life Insurance Co., 8 pp.
2. Joslin, E. P. et al.; Med. Ann. Dist. Columbia 14:63, 1945.
3. Allen, F. M.: Amer. Mercury 61:224, 1943.
4. Lloyd, T. P.: Tri-State Med. J. 14:2855, 1941.
5. Joslin, E. P.: Rhode Island Med. J. 28:639, 1945.
6. Lesser, M. A.: Amer. Prof. Pharm. 2:19, Oct. 1936.
7. "New and Nonofficial Remedies," Chicago, Amer. Med. Assoc. 1944, pp. 426-436.
8. Owens, L. B., Rockwern, S. S. & Brown, E. G.: Arch. Int. Med. 66:679, 1940.
9. Peck, F. B.: West Virginia Med. J. 40:341, 1944.
10. Duncan, G. G. & Barnes, C. E.: Am. J. Med. Sci. 202:553, 1941.
11. Peck, F. B. & Schechter, J. S.: Proc. Am. Diabetes, Assoc. 4:59, 1944.
12. Winkler, A. W.: Connecticut State Med. J. 8:291, 1944.
13. MacBryde, C. M. & Reiss, R. S.: J. Clin. Endocrinol. 4:469, 1944.
14. Mosenthal, H. O.: J.A.M.A. 125:483, 1944.
15. Lavites, P. H. & Peters, J. P.: New Internat. Clin. 2:170, 1941.
16. Sheltel, A. G.: U. S. Pat. 1,769,862.
17. Stanley, P.: Am. J. Med. Tech. 6: No. 6, Nov. 1940.
18. Editorial: J.A.M.A. 120:491, 1942.
19. Stoklosa, M.: J.A.Ph.A., Science Ed. 28:1044, 1939.
20. Lyon, D. M.: Med. Press & Circ. 203: 170, 1940.
21. Editorial: J.A.M.A. 115:1823, 1940.
22. Crossen, G. E.: J.A.Ph.A., Pract. Pharm. Ed. 2:362, 1941.
23. "Pharmaceutical Recipe Book," Ed. 3, Washington, Amer. sharm. Assoc., 1943, pp. 294-8.
24. Hruby, A. J.: in "The Pharmacopoeia and the Physician," Series 2, Chicago, Amer. Med. Assoc., 1943, p. 79.
25. Lesser, M. A.: Drug & Cosmetic Ind. 45: 422, 1939.
26. Steklosa, M. J.: (through) Drug Topics, Sept. 29, 1941.
27. Lascoff, F. D.: New York Phys. 19:48, Oct. 1942; 22:4, March 1944.
28. Dauer, M.: "Medical Formulary and Prescription Manual," New York, Little & Ives, 1935, pp. 40-55.
29. Watson, R. W.: J. Mt. Sinai Hosp. (N.Y.) 11:327, 1945.
30. Rudy, A. & Hoffmann, R.: New England J. Med. 227:893, 1942.
31. Joslin, E. P.: "A diabetic Manual," Philadelphia, Lea & Febiger, 1941.
32. Bowen: J.A.M.A. 55:209, 1910; Boston Med. & Surg. J. 176:96, 1917.
33. Sutton, R. L. & Sutton, R. L., Jr.: "Diseases of the Skin," Ed. 10, St. Louis, Mosby, 1939, pp. 85. 267-8.
34. Brandaleone, H., Standard, S. & Ralli, E. P.: Ann. Surg. 105: 120 1937 B.
35. Conway, H.: Conference on Therapy: J. A. M. A. 115:529, 1940.
36. Brandaleone, H.: Ann. Surg. 108:141, 1938.

Consumer Testing

(Continued from page 349)

new product, and then price sets the limits of quality on the basis of a fairly uniformly used trade mark-up. If the commercial history of perfumes and cosmetics teach anything, it is certainly that quality is an essential ingredient of continued success and that a price not in line with quality may fool consumers once, but not enough of them twice to keep a business going.

It is with the question of discriminating taste that the

interest in this test would seem to lie. And since elementary fact finding of this sort has become so frequently a sort of parlor game, it is too bad that a university does not sometime approach this problem as a psychological one in an effort to find out why such tests usually work out this way. Not in perfume alone, but in most products appealing to the senses, this same, difficult-to-explain, first impression is at wide variance with commercial experience—with the every-day free choice of buyers over a sustained period.

Cigarette blind-fold tests had their day of notoriety largely because these tests appeared to upset and refute established tastes. We know of one series of informal tests in which popular brands and some lesser known cheaper brands were used. When a cigarette was selected which was not the type usually smoked—which happened frequently—a full pack of the cigarette selected was given to the individual with a request that he finish the pack. Almost unanimously these smokers reverted to their accustomed brand before finishing the pack.

Flavors open a wide field of speculation in individual tastes, in variations between sustained taste and initial or one time tastes, that parallels the problems in selecting sustained perfume preferences.

Even in hearing, this same lack of initial critical taste seems to deny the fact of quality variations or even the need for quality. Extended tests have recently been made at Harvard between a number of Stradivarius violins, several Guarnerius violins, a Balistrieri, a Yuskevitch, a Phillips, several Sangsters, a Koch, a Stanley, and violin X, which was bought with case, bow, and set directions for less than $15. All were tested for quality of tone, ease with which steady tones were produced, distribution of loudness with pitch, and duration of tone after the bow was removed.

Dr. Saunders, who conducted the test, admitted that "a few especially gifted and experienced listeners can distinguish an old violin of high quality even over the radio, but only the most gifted. Audience tests, showed this very clearly." Dr. Saunders states further that "there are lurid details to emphasize this point that we do not feel free to publish."

It is common experience in the cosmetic industry when the critical judgment of an experienced perfumer is not available in a company, to encounter baffling and inconclusive opinions in odor tests. It is rarely the case that a carefully conducted test among the girls and other personnel of the company points the way to odor selection. One company, recently testing a group of odors among personnel for selection of the best of six samples, had to abandon the test when all six of the odors received nearly the same number of votes. A second test conducted among over fifty beauty editors was equally inconclusive. Yet these six odors mentioned were the creations of six different companies and varied widely in price, character, and quality.

Another test, made a few years ago among a considerable number of corporation executives, to select from five samples the most-liked men's odor, gave such

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an equal distribution of preferences so as to be useless as an indicator in odor selection.

It must be concluded that a relatively small number of people have a sensitive, critical judgment in discriminating between the superlatively good and the average fair in smell, taste, hearing, and, no doubt, seeing. Yet it must also be accepted as a fact, because it is the whole history of business, that a surprisingly large public audience shows a constant appreciation of high quality, and that people are never fooled for long by carelessness or inferior quality.

It would seem that the following conclusions could be reached in an attempt to reconcile such tests with the facts of life as shown in commercial experience:

1. That preference as expressed in such tests may bear little relationship to sustained preference; that first impressions are not reliable indications to the real preference of an individual after this individual has "lived with" the odor or flavor for a sufficient period of time.

2. That certain few people have a sensitive, discriminating, cultivated taste, and the imponderable influence of their opinion, given time, reaches far beyond their numbers.

3. That among the whole population it must be accepted that there are fairly well defined taste markets, ranging from the critically sensitive to baudy vulgarity. These markets need bear little relationship to wealth, environment, or social position.

4. That people inexperienced in testing perfumes or flavors are really at a loss, partly because they may have no established preference, and partly because they have no established basis of comparison. That is, they are inexperienced in comparing good and bad and have formed no standards in their own minds.

5. That many people are physically handicapped, that is, they have a defective or insensitive sense of smell, color blindness, no "ear for music."

H. A. B. Dunning

(Continued from page 343)

siderable time looking for a satisfactory germicide for urological use. His efforts were rewarded when he and his colleague, Dr. Edwin Davis of the Johns Hopkins Hospital, found Mercury Phenolsulphonphthalein. This compound was closely related and is the forerunner of the Mercury Resorcin Phthalein derivative, better known as "Mercurochrome."

Dunning's employers crowned his success with a chance to share in the ownership of the company he had worked so hard for. As time wore on, researcher Dunning became more and more the driving head behind Hynson, Westcott & Dunning. In 1930, the number three partner became the controlling head—which he is today.

Dr. Dunning the man is a rather heavy, distinguished-looking gentleman. He is less like the caricatured business executive than he is a movie-director's

idea of what a U. S. senator should look like. Dr. Dunning has four children, two by his first wife who died in 1906 and two by his present wife. His son Fitzgerald is now Hynson, Westcott & Dunning's general manager. Two other sons, all Ph.D.'s, are also serving the company in executive posts.

Not the least of Dr. Dunning's many activities has been his great interest in promoting the pharmacy profession. He has labored long hours and contributed much money to aid this very noble cause. It is no secret that the hard-working head of Hynson, Westcott & Dunning was the main force behind the building of the American Pharmacy Institute. His generous financial support and organizing ability provided the needed spark to construct what is now considered one of Washington's landmarks.

More recently the H. W. & D. chief executive got into the news in connection with the development of the atomic bomb. At a Johns Hopkins testimonial dinner to the men and women of its staff who were actively engaged in the development of the VT or proximity fuse and other problems related to atomic research, tribute was paid to Dr. Dunning for his "vision to contribute to nuclear science in its infancy." It was announced at that time that in 1939 Hopkins' able physicist, Dr. Robert Fowler and staff, had smashed the atom and were ready to attempt a separation of uranium into its two isotopes, Uranium 238 and Uranium 235. The stumbling block was lack of funds. Dr. Dunning was approached for financial aid.

The Hopkins investigators say that while many a man of less lively imagination, vision and foresight would have ridiculed the idea of getting power from the atom, Dr. Dunning realized immediately the possibilities of such research, not only in the separation of the uranium isotopes, but also the possibilities that lay in the separation of other isotopes. He agreed on a general program of isotope separation.

The researches of Fowler and his associates led to the development of a relatively simple method of producing the important volatile compound, uranium hexafluoride. With Dr. Dunning's consent the patents were given over to the U. S. government. The process was later adopted by the Manhattan Engineer District and used to produce thousands of pounds of hexafluoride in connection with the atomic bomb project.

As H. A. B. Dunning enters his sixty-ninth year, he plans to pare down his business activities, give more of his tremendous energy to community and professional interests. In looking back over a busy-packed sixty-eight years, able Dr. Dunning believes that there is very little difference in the mental capacity of most individuals. He feels that he is living proof that every boy, no matter what his financial or family background, has a chance for success in life.

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Marketing Amino Acids

(*Continued from page 339*)

doubtedly be offered and used until such time as widespread clinical results on the part of the medical profession as a whole indicate the ones which are most efficacious in the conditions in all parts of the country and in all classes of people in which the administration of amino acids are indicated.

The amino acids have been used by doctors in cases of severe loss of proteins due to varying conditions; wounds, burns, fractures; in cases of starvation; in cases of protein loss through the kidneys, or from copious loss of blood, diarrhea, or vomiting, or from feeding of diets containing large amounts of roughage; in cases of protein loss from infections or injuries; and in surgical cases. In other words the use of amino acids by doctors has been mainly in cases where proteins were badly needed but could not be assimilated rapidly or not at all. The use of amino acids in ulcer cases is one of the latest applications.

However, these are all severe abnormalities that have definitely proven the true values of the amino acids. But again to turn to vitamins, they were first proven in the correction of definite conditions such as the curing of pellegra with riboflavin, the curing of scurvy with ascorbic acid, and the elimination of various other serious manifestations with other vitamins. Later they were put to use in much milder conditions which were not at first recognized as the first stages of the conditions corrected with vitamins when they were easily recognizable. The work that has been done and is being done by physicians in the use of amino acids in these serious cases which come under their care, for the most part with hospitalization, and the absolute proof that these products have a very definite place in the maintenance of health. As these products are used more and more by physicians, the medical profession will come to appraise their value in less serious conditions and will start prescribing them in a more general fashion.

It is when the doctors start prescribing them to ambulatory patients that the general public will start to show interest in them. There is no way in which the medical profession, try as it will, can prevent the public from taking hold of the products which doctors prescribe and passing it on to others whether they need it or not. After all, the most certain way to build up a medical preparation today is to detail the doctors and get them to prescribe and recommend it. After a sufficient number of years of this work, a real demand sets in on the part of the medical profession and then the demand starts to bubble over and the product is being bought over the counter for self-medication.

While it is not being spoken of generally among the pharmaceutical manufacturers, this general consumer interest in amino acid preparations is most certainly anticipated at some time in the not too distant future for the reasons outlined above. Organized medicine is well aware of this situation also, in fact they started some time ago to warn manufacturers and anyone else

who would listen against exploitation of these products to the general public. The doctors have repeatedly tried to stop the consumption of vitamins by people who only took them because they thought they needed them and had not consulted a physician as to their requirements. This has failed to a very large extent to stop the general consumption of vitamins. Such a course will probably fail to stop the general consumption of amino acids after they are once firmly established in the mind of the public through the recommendation of the doctor. However, if the medical profession is worried about this phase of the subject, think of the recommendation of a sales-minded executive to his superiors in a drug manufacturing company. His recommendation was that vitamins and amino acids are food products and should be sold in food stores. In the first place, he says, this would get women away from the idea that these products are drugs and that, being foods, or food supplements, they can be taken freely without harm. Secondly, the average woman visits the grocery store at least twice a week while she only visits her drug store a couple of times a month; this would bring these preparations to her attention much more often and therefore she would be more inclined to buy them.

Development of Pharmaceutical Specialties

(Continued from page 433)

In most companies the men in the field serve a dual function—in the morning they are salesmen calling on the drug trade, in the afternoon they make their professional calls. There are exceptions to this, of course, but in most cases, the trade and professional calls are divided between the a.m. and p.m.. It is essential, therefore, that the men be carefully trained and supervised so that they know how to get the new specialty stocked, and then how to get the physicians to prescribe it. This is not an easy assignment.

Planning is probably the key to successful detailing. Much time and effort can be lost if the representative does not know how to approach his assignment. Most of the top-flight men we have known attribute their continued progress to planning—it is the only way they know to get the most out of their territories. They make it a point to learn where to concentrate their efforts most productively. Diluted effort is a result of bad planning. In this connection, when a new specialty is being introduced it is of utmost importance that the representative plan his program so that he gets his wholesalers and retail stores stocked. Next he should make certain that his hospitals have a few stock packages on hand in the pharmacy. The detail program should then be launched, making certain beforehand that the technical information concerning the product is thoroughly understood and ready to be presented with enthusiasm and conviction.

Foreign Market: The drug industry has exhibited an increasing awareness of the important role it can assume in extending U. S. medical advances to other nations. Prior to World War II, Germany dominated

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the foreign market, especially in Latin America. A recent study by Delahanty*, chief of the Drugs and Pharmaceuticals Unit, Bureau of Foreign and Domestic Commerce, revealed that a 100 million dollar postwar foreign market is available for those drug firms interested. He believes that more pharmaceutical companies, especially the smaller ones, should share in this market.

In the past, some U. S. companies have hastened to get foreign business without proper preparation. They found that it was a mistake. Registration, trade-mark application, a well-defined sales policy and distribution through reputable and hard-working channels are fundamentals that can not be overlooked. Knowledge of a country's individual needs and habits are extremely important. Finally, the selection of a man who knows foreign markets, has good contacts, can speak several languages and has been successful, is most desirable if a concerted effort is to be made to increase foreign business. However, if a company only desires to market a few specialties outside the country, the advice of the Bureau of Foreign & Domestic Commerce, a reputable export bank, McGraw-Hill's excellent publication, *El Farmaceutico*, can all be sought for worthwhile information and guidance.

Those who are interested in the development and marketing of ethical pharmaceutical specialties might well give careful consideration and study to the foreign market as an added source of revenue.

*Delahanty, T. W.: Small Firms Should Share in Foreign Drug Markets. Foreign Commerce Weekly, 20 : 3 (June 30) 1945

(To be concluded)

SURGICAL GLOVE POWDER: Please advise if you know of any powder besides talcum and cream of tartar that can be used as a dusting powder for surgeons rubber gloves. Reading.

According to M. G. Seelig in the "Southern Medical Journal", for July, 1945, a new special starch powder prepared by the Research Division of the Corn Products Refining Company may be used as a substitute for talc on surgical rubber gloves. It is said to have all the desirable properties of starch without the "jel". It may be boiled or autoclaved without forming a paste.

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CREAMY PERMANENT WAVE SOLUTION: We are interested in a formula for a cream emulsion permanent wave solution ,one to have ammonia as the main softener agent and one using other alkalis. We would appreciate your forwarding this information to us as soon as possible. London.

In making cream emulsion permanent wave solutions, the general procedure is to add to standard type solutions from one to two per cent of an emulsifiable oil made especially for this purpose. In addition we might mention that a milky appearance may also be obtained by adding a little mineral oil dissolved in sulfonated castor oil to a standard type permanent wave solution.

TRIETHANOLAMINE SHAMPOO: For a long time I have gotten good results from the use of triethanolamine in cosmetic preparations. I am wondering if I could use this material to make a shampoo. Havana.

A liquid shampoo made with triethanolamine is prepared as follows:

Coconut oil fatty acids	63 parts
Olein	27 "
Triethanolamine	48 "
Water	60 "

The coconut oil fatty acids and olein are melted together and brought to a temperature of about 50° C. In another vessel the triethanolamine is gently heated with the water and then the fat mixture added to it. After thorough mixing, reaction takes place rapidly. When reaction seems complete, add 410 parts of water and again mix well. The soap obtained should be completely clear, so that no filtration is necessary. If the soap is not clear, add a little more triethanolamine and mix well. A part of the water can be replaced by alcohol. Perfume is stirred into the soap after cooling. A second formula is as follows:

Olein	110 parts
Coconut oil fatty acids	80 "
Triethanolamine	100 "
Alcohol or half alcohol and half water	110 "

HORSE LINIMENT: As a subscriber we would appreciate your help regarding the formulation of a horse liniment containing wormwood, thymol, menthol and acetone. What proportions would you recommend or if you have any suggestions as to substitution of any item in the formula, this information would be appreciated. Pittsburgh.

I am afraid that I cannot give you a formula of a product containing the materials specified in your letter. However, a standard horse liniment can be made from the following ingredients:

Camphor	5.0
Tincture of cantharides	5.0
Tincture of capsicum	5.0
Tincture of arnica	50.0
Alcohol	35.0
Diglycol oleate	5.0

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